



REPORT
ON THE
STATE OF PUBLIC HEALTH
IN BURMA

DURING 1939

VOLUME I (REPORT)

RANGOON

SUPDT., GOVT. PRINTING AND STATIONERY, BURMA

1940

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RESOLUTION

ON THE

Report on the State of Public Health in Burma For the Year 1939.

Extract from the Proceedings of the Government of Burma, Department of Health and Public Works, Public Health Branch,—No. 403SJ40, dated the 9th November 1940.

READ—

The Report on the State of Public Health in Burma for the year 1939.

RESOLVED THAT—

The Report be published.

By order,

SHWE BAW,

Secretary to the Government of Burma.

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REPORT

ON THE

State of Public Health in Burma

During 1939.

CHAPTER I.

Introduction.

Rainfall.—Burma is an agricultural country, where the monsoon plays a prominent part in the economic condition and health of the people. A short account of the rainfall in Burma during the wet period May to October 1939, received from the Director, Burma Meteorological Department, is furnished below:—

“The total rainfall during the month of *May* was in moderate excess in Arakan and Tenasserim, in slight excess in the Delta and the Dry Zone and normal in the Northern Districts, Western Hills and the Shan Plateau. In *June* it was in slight to moderate excess in the Northern Districts and the Shan Plateau and normal elsewhere in the country. In *July* the rainfall was in moderate excess in the Northern Districts, Arakan and Shan Plateau, in slight excess in the Western Hills, normal in Tenasserim and the Delta and in slight defect in the Dry Zone. In *August* it was in large excess in the Dry Zone and the Western Hills, in slight excess in Tenasserim and the Delta and normal in the other divisions. In *September* the rainfall was in moderate excess in the country except in the Delta where it was in slight excess and in the Shan Plateau where it was normal. In *October* the rainfall was in large defect in the Northern Districts and in moderate defect elsewhere in the country except in the Western Hills where it was normal. On the whole the rainfall over the country during the monsoon period, *May to October*, 1939, was 11 per cent above normal.”

Economic Conditions.—The Commissioner of Settlements and Land Records in reviewing the condition of the agricultural population during the year ending the 30th June 1939 remarks, “This year was again a bad one for the agriculturists on account of the continued slump in the district prices of agricultural produce to which was added, in a number of districts, poor yields owing to the unfavourable season. The value of land was generally stationary; it fell in a few districts in sympathy with the fall in prices of principal crops. An increase in the value of land is also reported in a few districts, the slight rise in Tharrawaddy being ascribed to improvements made by the River Training Department. The rise in Amherst is said to be due to a good harvest this year and to good paddy prices last year. Alienation to

non-agriculturists and agricultural debt were normal in most districts in Lower Burma but were increasing in Upper Burma due to unsatisfactory prices last year and to foreclosures of mortgages. Rents remain stationary during the year, but the area rented has somewhat increased particularly in Lower Burma. The relations between landlords and tenants did not change during the cultivating season of 1938-39, mainly because tenants feared to lose their tenancies if they raised any objections. But in 1939 with Tenancy legislation in the air by the time lands are usually let out tenants had become vocal and, to some extent, organised, and considerable pressure was exerted on landlords in several districts to force a reduction in rents. The wages of agricultural labourers remained normal during the year but agitation for an increase in wages had commenced by the end of the year of report. Agricultural indebtedness is generally reported as stationary. The low prices of produce have not enabled debts to be cleared but the refusal of many landlords to make advances is reported to have prevented the contraction of further debts."

Cost of Rice.—Rice is the staple food in Burma. The average cost of a basket of 9 gallons weighing 75 lbs. was Rs. 2-9, which is one anna less than the average price prevailing in 1938. The average price which stood at Rs. 2-7 in January declined to Rs. 2-5 in February, March and April. From May to August it remained steady at Rs. 2-8. In September it rose to Rs. 2-11 and in October to Rs. 2-14. There was a drop of one anna in the average price in November but it rose again to Rs. 2-14 in December. The highest annual average price, *viz.*, Rs. 3-3 obtained in Kyaukpyu and Prome districts and the lowest, *viz.*, Rs. 1-13 in Meitkila district.

CHAPTER II.

Commentary on Vital Statistics.

Area and Population.—The area of Burma is 261,747 square miles and its population according to the 1931 census is 14,657,006. A perusal of the main Vital Statistics Statements I and II published in Volume II of this Report will, however, show that they relate to an area of 117,402 square miles and a population of 12,102,290 only. The reason for this difference is that the statistics in the main statements refer to only 31 out of 40 districts in Burma. The figures from nine districts are not included as they are not considered to be sufficiently reliable and accurate. These backward areas include Bhamo, Katha, Myitkyina and Upper Chindwin districts, where, though full registration is in force, the statistics are still considered to be inaccurate. The figures from the Shan States, Salween and the

Pyinwa circle in Akyab district where a lesser standard of registration is in force are likewise grouped under this head. Again the returns from the Arakan Hill Tracts, Chin Hills and other very backward mountainous tracts where a still lower standard of registration is in force are excluded. The returns from all these backward areas are published in Statement II (a).

Taking the 31 districts which are included in the main statements it is seen that 10,689,689 of the people live in the rural areas and 1,412,601 in the urban areas. During the year one village-tract was transferred from Tharrawaddy to Prome district and a portion of the rural areas was included in Myaungmya town. The necessary changes in area and population on account of these transfers will be shown in the statements published in the next year's report.

Registration and Transmission.—In the rural areas every birth and death occurring in a village-tract has to be reported to the headman within seven days of its occurrence by the owner of the house in which it occurs, or if the owner is absent or unable to report, then by the eldest adult male, and failing him by the eldest adult female living in the house. The headmen register these events in permanent birth and death registers and also in trifoil books. They send the foils to the Township Office or nearest Police Station as directed by the Deputy Commissioner. The foils from villages within five miles of a police station have to be sent monthly, from villages over five miles and under twenty miles quarterly and from distant village-tracts half yearly. The despatch of foils from distant village-tracts once in six months has led in many instances to the misplacement or loss of foils in the possession of headmen. The half-yearly despatch of foils has already been substituted by quarterly despatch in all the five districts in which whole-time District Health Officers are employed. Action was taken during the year to have the half-yearly despatch substituted by quarterly despatch as far as possible in eight other districts with effect from the 1st January 1940. Headmen have at present to bring the birth and death foils with them for delivery to the township office or police station whenever they go to the Township Headquarters on business, every month, quarter or half year ; or else they have to send a special messenger for their delivery. In the Hlegu Health Unit area village headmen have been given stamped and addressed envelopes for sending the birth and death foils direct to the Health Unit Office every month. This system has worked satisfactorily for the last 10 years. In Pyapôn district the despatch of foils through post during the years 1929 and 1930 made the work of collection easy ; it fell into disuse in subsequent years but a fresh impetus was given to it in 1935 since when it has worked well. Before approaching Government for the

introduction of the system in other districts, the Commissioner, Irrawaddy Division, was approached to have the scheme experimented with in two other districts in his division. After consulting local officials, he recommended Maubin and Henzada districts. In the former district the postal despatch of foils was introduced in all but the Danubyu township from the middle of the year. In the case of Henzada district, arrangements were made by the Director-General of Posts and Telegraphs to place post boxes in 24 new villages, so that the headmen can post the foils without travelling far, and the system was introduced from the 1st September 1939.

The Township Officers prepare birth and death returns on the prescribed forms separately for each English month and for each village-tract in their townships and send them together with the foils to the District Health Officer quarterly. The latter prepares a complete return by townships for the whole district and sends it on to the Director of Public Health, Burma.

In the urban areas it is mandatory on the part of the municipal and town committees to frame bye-laws for the registration of births and deaths under section 133 of the Burma Municipal Act. These bye-laws generally provide that a birth should be reported within a week and a death within twenty-four hours of its occurrence. The ward headmen or vaccinators in the case of small Municipalities act as registrars of births and deaths. They transmit the foils to the Health Office once a week. Weekly and monthly returns are submitted by the Health Officer on the prescribed forms to the office of the Director of Public Health, Burma, Rangoon, where the final consolidation of all figures takes place.

Verification of Vital Statistics.—The correctness of the entries made by headmen in the birth and death registers and counterfoil books is checked by the public health staff whenever they go on tour to the villages. Subdivisional and Township Officers also do verification at the time of their inspection. During the year out of 32,241 registration stations the public health staff inspected 13,079 and verified 629,812 entries. District officers visited 3,781 villages and verified 82,445 entries. Districts in which the public health staff exercised an efficient check over the registration of vital statistics include the rural areas of Henzada, Pakôkku, Yamèthin, Thatôn Magwe, Myaungmya, Akyab and Amherst. In the course of verification of the entries the public health staff detected 5,876 omissions of births and 356 of deaths and these constitute 1·51 per cent and 0·15 per cent respectively of the entries verified. As a result of the inspections 5,309 prosecutions were instituted. In 4,470 cases fines ranging from annas two to Rupees five

were imposed, four were reprimanded and 77 were awarded communal labour. Action was also taken against 74 village headmen either for not registering births and deaths or for not transmitting the foils in time. Fines ranging from annas eight to Rupees five were imposed in 29 cases, 44 were warned and one was removed. On the other hand 12 headmen in Bassein district were rewarded for rendering good assistance to the Public Health Department during the year and in Myaungmya district five headmen were recommended for rewards for good work in connection with the registration of vital statistics.

Immigrants and Emigrants.—Figures of migration by sea are collected by this Department from the Port Health Officers and supplied to the Director of Statistics monthly for publication in the Burma Trade Journal. No statistics are available as to the number of persons who come into or depart from Burma by the land routes though the volume of traffic by these is believed to be considerable. The Port Health Officer, Rangoon, is showing in his return the figures of incoming and outgoing passengers by air lines separately but these are very small. During the year 244,973 passengers arrived in Burma through the ports of Rangoon, Akyab, Kyaukpyu, Bassein, Moulmein, Tavoy and Mergui. The departures from these ports totalled 208,323. There was thus an increase of 36,650 in the population of Burma from this source. By far the largest portion of this traffic took place through the port of Rangoon which recorded 222,265 immigrants and 178,292 emigrants. The bulk of the migration is between India and Burma. The port next in importance to Rangoon is Akyab which recorded 21,689 incoming and 29,107 outgoing passengers. The excess of the outgoing over the incoming people at this port is an annual feature. The explanation for this phenomenon is to be found in the fact that during the harvest season most of the labourers from Chittagong come into the district by the land route and depart therefrom by sea, at the end of the season.

Mid-year Population.—This is estimated as 13,244,041. This figure is arrived at by taking into account the excess of births over deaths and the balance between immigration and emigration excluding the Arakan figures which, as has already been noted, are not dependable. The current year's birth rate if calculated on the mid-year population will be 32'30 and death rate 22'92. The divergence between the birth rate calculated on the 1931 census population and that calculated on this year's estimated population is 3'04, while the divergence in the death rate by the same process comes to 2'17.

General Birth, Death and Infant Mortality Rates.—In the following table a comparison is made of the birth, death and infant death

rates of Burma in 1939 with those of the Indian Provinces and the Federated Malay States in the same year :—

Countries.	Birth rate.	Death rate.	Infant mortality rate.
Indian Provinces—			
Madras	38·53	25·26	175·50
Punjab	47·20	25·61	167·57
Assam	28·44	19·25	149·73
Bengal	32·02	21·85	146·65
United Provinces	36·26	23·09	139·45
North-West Frontier Province	30·35	18·74	130·52
Central Provinces	38·28	31·07	218·62
Bombay	43·16	27·55	152·70
Sind	20·88	11·55	105·75
Bihar	33·3	23·0	155·3
Orissa	34·92	28·18	197·41
Federated Malay States	41·0	17·5	127
Burma	35·34	25·09	203·85

In England and Wales during the year 1937 the birth rate was 14·9, the death rate 12·4 and the infant mortality rate 58. The very large number of births in this country is counter-balanced by sickness and disease among babies many of whom do not survive their first year of life. Even among those who survive, the sickness is great and this eventually tends to lower the longevity of the life of the people.

Birth Rate.—This year's birth rate is 35·34 (34·59 *). It is the highest since 1918. Compared with the five-year mean it shows an improvement of 2·01. The largest number of births was recorded in July and the least in February. Male births exceed female births in all but five districts. They are Pyapôn, Thayetmyo, Meiktila, Myingyan and Shwebo. The number of males born to every hundred females is 104 and this proportion of male to female births has remained steady since 1932. Looking at the birth rates among the four main classes in Burma it is seen that the rate among Buddhists is 36·55, Mahomedans 31·51, Christians 29·37 and Hindus 17·89. The low birth rate among Hindus is probably due to the large preponderance of males among this community in this country.

Death Rate.—The current year's death rate 25·09 shows a fall of 0·64 compared with the previous year but is in excess of the five-year mean by 2·41. There was a decrease of 7,784 deaths, compared with 1938 most of which has occurred under the head "All Other Causes". It is believed that the fall in infant mortality noticed this year has occurred under this head. Decreases in mortality were noticed under plague, respiratory diseases, injuries and smallpox, while increases were

* The figures within brackets refer to the previous year.

noticed under fevers, cholera and dysentery and diarrhoea. As in previous years the lowest death rate was recorded in the month of May and the highest in December. By classes the death rate among Buddhists was 25·87. Mohamedans came next with a rate of 20·31 followed by Hindus 18·66 and Christians 17·89. Judging the death rates among these classes by sexes it is seen that there is an excess of female over male deaths among Hindus and Mohamedans, which may in part be due to the more indoor kind of life lead by the females of these classes. An examination of the distribution of deaths and the death rates according to age and sex reveals that the death rate among females is greater than males during the age periods 20—40. This is mainly due to the greater risks attendant on childbirth among females in this period. The mortality rate declines rapidly from birth, reaching the minimum in the age period 10—15 years and increases again to a maximum at the end of life, the increase being more gradual than the fall.

Infant Mortality Rate.—This is 203·85 for the year under review representing a decrease of 18·72 below the last year's rate but an increase of 1·26 above the five-year mean. Infant deaths constituted 28·72 per cent of the total mortality. Of the infant deaths, 12·24 per cent occurred within one week of birth, 10·22 per cent over one week and not exceeding one month, 60·81 per cent over one month and not exceeding six months and 16·73 per cent over six months and not exceeding one year. The factors underlying this heavy wastage of life will be dealt with in the section of this report which deals with child welfare.

Birth Rate (Rural).—The birth rate for rural areas is 35·35. It shows a rise of 0·71 compared with the previous year and 2·07 compared with the five-year mean. Fourteen out of 30 districts recorded rates above the current year's provincial mean, while 13 recorded improvement over their last year's figures. The districts recording the highest birth rates are Yamèthin 48·19, Shwebo 44·31 Sagaing 40·78, Lower Chindwin 39·73, Pakôkku 39·44 and Myaungmya 37·81. The increase in the number of births recorded in Yamèthin district is remarkable. In 1933 it was 10,879 and in 1939 17,256. Not only have the headmen and the *ywagaungs* in distant villages, who do registration of births and deaths in this district, performed their duties satisfactorily, but the public health staff have exercised effective supervision as well, as is evident from the 486 omissions of births and deaths detected by them. The presence of the Rural Uplift Centre at Tatôn and its influence in the district, generally would also seem to account in part for the improved registration. While the birth rates of Shwebo and Pakôkku districts may be

considered to be steady, those of Sagaing and Lower Chindwin, while still high, show signs of decline. Satisfactory improvement in registration has taken place during the year in Pegu and Thatôn districts. These two were formerly recording very low birth rates. The other districts from which considerable increases in rates are reported are Tavoy, Myaungmya, Insein, Hanthawaddy and Prome. The districts recording the lowest birth rates are Myingyan 22'97, Mandalay 24'61, Sandoway 28'62, Toungoo 29'76 and Mergui 29'31. Steps are necessary to improve the state of registration in Myingyan and Mandalay districts.

Birth Rate (Urban).—The rate is 35'28. It shows an increase of 1'10 compared with the previous year and 1'58 compared with the five-year mean. Forty-one towns have recorded rates higher than this year's provincial mean and 40 above their respective rates for the previous year. The highest rates during the year have been recorded in Lashio 57'35, Mandalay 56'94, Mawlaik 56'19, Taungdwingyi 54'44, Taunggyi 50'28, Maymyo 48'84, Kawkareik 47'91 and Kyauksè 45'29. In Lashio there has been marked improvement in registration. The number of births registered in this area has increased from 153 in 1934 to 266 in the year under review. Mandalay has been recording a steady high birth rate but this year the rate is 0'42 below its previous year's and 1'25 below its five-year mean. Mawlaik is a very small town with a population of only 2,278. The chances of domestic events like births and deaths to escape the notice of the headman, who is the registrar of births and deaths, are few. Apart from cantonments, the towns recording the lowest rates are Thingangyun 15'41, Akyab 21'66, Sandoway 22'60, Myitnge 24'64, Nattalin 24'68, Kyangin 25'07, Insein 26'02 and Kyaikto 26'17. The Health Officer, Thingangyun, in commenting on the low birth rate remarks, "Owing to the close proximity of the town and the absence of proper lying in hospital at Thingangyun many of the confinements took place either in the Dufferin Hospital or at other private clinics at Rangoon and the births were registered in the Rangoon Corporation". The low birth rate in Akyab is to a great extent to be attributed to the predominant male population in the town. The ratio of males to females is 3 : 1 and if the birth rate were to be calculated on the female population only, it will be 88 per mille. It is believed that in Insein and Myitnge, the same factor is to a lesser extent responsible for the low rates. The low rates in Sandoway, Nattalin, Kyangin and Kyaikto indicate that improvement in registration is needed.

Death Rate (Rural).—The death rate for rural areas is 23'91. It shows a drop of 0'50 compared with the previous year but an excess of 2'47 compared with the five-year mean. It is not possible to expect from the village headmen who are the registrars of death in

rural areas anything but the most general classification of causes of death. They are of course familiar with the principal epidemic diseases like cholera, smallpox and plague but like all laymen they are unable to differentiate the various kinds of fevers or respiratory affections. Any rise in temperature is apt to be classified as fever. The result is that 45 per cent of the deaths in rural areas are ascribed to fevers and 49 per cent to the residuary dumping head known as "All Other Causes". Thirteen districts record rates above this year's provincial mean and ten above their respective rates for the previous year. Compared with the year 1938 there has been an increase of 1,476 deaths under fevers, 772 under cholera and 47 under dysentery and diarrhoea. The principal decrease was under "All Other Causes", under which head 6,507 fewer deaths were recorded. There were also minor decreases under respiratory diseases — 434, plague — 324, injuries — 223 and smallpox — 119. The highest death rates were returned from Shwebo 38'04, Yamèthin 34'15, Lower Chindwin 32'25, Prome 30'14, Sagaing 30'11 and Thayetmyo 29'59. In Shwebo the increase in the death rate is stated to be due to an unusually large number of deaths from malaria and to an increased number of deaths due to plague. Yamèthin district which has recorded the highest birth rate during the year has also recorded a comparatively high death rate, which should be taken to connote good registration. The total number of deaths in Lower Chindwin district is considerably higher than the previous three years. There was a large number of deaths mostly malaria, which took an epidemic form in Budalin, Kani and Yinmabin townships. The death rates in Sagaing and Thayetmyo districts show slight improvement over their previous years' rates; but in Prome there was an increase of 3'31 in the death rate, mainly under fevers. The districts recording the lowest rates are Amherst 16'06, Mergui 16'53, Kyaukpyu 17'38 and Myingyan 17'85. From the low birth rates, coupled with the low death rates recorded in Myingyan, Mergui and Kyaukpyu, it has to be inferred that registration of vital statistics in these districts was not up to the mark. This is not so in the case of Amherst district which should be considered to have had a healthy year.

Death Rate (Urban). —The urban rate 34'00 shows a drop of 1'75 compared with the previous year but is still in excess of the five-year mean by 1'98. As the causes of death are verified by medical men in most of the towns, more detailed statistics are available as to the nature of the last illness from which people died. An examination of these statistics reveals that there were 9,057 infant deaths from causes such as premature births, infantile malnutrition and debility and infantile convulsions. The principal mortality from other diseases were as follows :—Pneumonia 4,461, general debility and anaemia 3,984,

respiratory diseases excluding pneumonia, pulmonary tuberculosis and whooping cough 3,313, malaria 3,029, old age 2,561, pulmonary tuberculosis 2,520 and diseases of the digestive system 2,259. Thirty-four out of 75 towns included in the main statements record rates above the current year's provincial mean and 36 above their respective rates for the previous year. The highest death rates during the year were recorded in Lashio 76·54, Taungdwingyi 61·16, Myingyan 60·81, Thamaing 51·73, Prome 47·29, Shwedaung 46·86, Mònywa 46·76, Shwebo 46·61 and Nyaunglebin 46·60. In Lashio the number of deaths ascribed to malaria is twice that recorded in the previous year. This may be due to malarial personnel on the Burma-China Road which passes through many highly malarious areas. Infant deaths have also increased. In Myingyan the increase in the death rate was mainly due to increase in the incidence of plague and respiratory diseases. The high death rate in Thamaing is due principally to a high incidence of infant mortality and to the high death rate at the Mental Hospital. Its infant mortality rate is 506·10, which means that only half the number of births survive their first year of life. In Prome and Shwedaung malaria at the close of the previous year and its recrudescence in the latter half of the current year resulted in keeping the general death rate at a high level. Apart from cantonments, the towns returning the lowest death rates are Myitnge 17·07, Kyaukpyu 17·72, Kalaw 18·50, Akyab 19·37, Sandoway 21·87, Thingangyun 23·67, Toungoo 26·14 and Chauk 26·19. The population of Myitnge are almost all railway employees and their dependants. The death rate among the employees who are in the prime of life is generally low. The absence of a cemetery care-taker at Kyaukpyu, Sandoway and Kalaw makes one doubt the accuracy of the rates returned.

CHAPTER III.

Principal Epidemic Diseases.

Major Epidemic Diseases.—The major epidemic diseases in Burma are cholera, plague and smallpox. These diseases are notifiable both in rural and urban areas. The responsibility for taking preventive measures rests upon the local bodies concerned. The vaccination staff employed by them is considered satisfactory and they are generally able to control an outbreak of smallpox within their jurisdiction. In the case of cholera and plague, the Health Officers in towns are of great service in nipping an outbreak in the bud, but District Councils and Deputy Commissioners in charge of Local Funds in rural areas have to depend mainly upon the Sub-Assistant Surgeons of this Department for carrying out the necessary preventive measures. Recoveries are made by Government from local bodies on account of the pay and

allowances of these Sub-Assistant Surgeons for the period of their actual employment on epidemic duty.

Cholera.—The death rate from cholera, *viz.*, 0·12 is higher than the previous year by 0·07 but it is below the five-year mean by 0·09. Though there was the usual rise in the incidence of the disease from April to July, it was in the month of December that the highest number of deaths was recorded. The Irrawaddy and the Pegu divisions were most affected. Out of 1,468 deaths from this cause recorded during the year 1,252 were in villages and 216 in towns. The districts most affected were Tharrawaddy, Henzada, Maubin, Pyapôn and Prome. Cholera took a heavy toll in the western part of Tharrawaddy district along the Myitmakha Valley and lowlying flooded areas, as after the floods the village wells and tanks became polluted with dirty water. There were 540 attacks and 430 deaths of which 355 attacks and 277 deaths occurred in December. The townships most affected were Letpadan, Tharrawaddy, Zigôn and Minhla West. At times as many as three Epidemic Sub-Assistant Surgeons were employed and two Public Health Inspectors were solely placed on cholera duty. During the year, especially in the months of October, November and December, 23,468 anti-cholera inoculations were performed. In Henzada district cholera was continually present from April till the end of the year, with rises in May, July and December. Ingabu and Zalun townships recorded high mortality. There were 207 attacks with 148 deaths from cholera in Maubin district. Yandoon township topped the list in the number of attacks. Panhlaing creek in Yandoon township is considered to be the source of infection. Cases were often reported from the villages along this creek which borders Insein district. The total number of inoculations performed in the district was 26,025. In Pyapôn district the first case occurred in February and the second case in March. From the middle of April the disease became widespread and all the four townships were involved. The epidemic came to a close in the last week of May causing in all 80 attacks and 64 deaths. In Prome the disease was most prevalent in December.

In the urban areas the highest rates were recorded in Gyobingauk Danubyu, Henzada and Nyaunglebin. Cholera broke out in Gyobingauk on the 17th November. Ten deaths occurred among the families and neighbours of the Burmese labourers who attended a Hindu festival. From their quarter the disease spread to the rest of the town due to past and long neglect of general sanitation in the town and caused a total of 65 attacks and 38 deaths. In Danubyu the disease appeared in epidemic form twice during the year first in the month of May and again in the month of November. In Henzada the epidemic started in a case by the river side at Pyinmachaung quarter in the month of May. It rapidly spread to other quarters and reached its maximum intensity

in August and abruptly came down in September, after having caused during this period 66 attacks with 50 deaths. Of the 22 attacks and 12 deaths reported from Nyaunglebin during the year 20 attacks and 10 deaths were imported. From the beginning of January cholera was prevalent in many villages surrounding Nyaunglebin town. In the first week of February the disease broke out in epidemic form among the Ooriya coolies working at the Sittang embankment near Madauk. Being panic stricken about 100 of them came all of a sudden to Nyaunglebin by train from Madauk. Among these there were many patients actually suffering from cholera. The Health Officer took immediate steps to combat the spread of the disease and deserves to be complimented for his very energetic and successful measures in the time of great and sudden emergency.

Plague.—The death rate from plague is 0·27. This figure is an improvement over the last year by 0·11 but is above the five-year mean by 0·07. As usual, the outbreaks of the previous year carried over in the first quarter of 1939 and the largest number of deaths occurred in January. A decline set in April and the lowest figure was recorded in May. From June to September the outbreaks were of a sporadic nature and from October onwards an increase in incidence was noticed. More than half the number of deaths in Burma was reported from Mandalay division. Out of 3,266 deaths from plague reported during the year 2,282 were in rural areas giving a rate of 0·21. The districts recording the highest rates are Meiktila, Sagaing, Myingyan, Shwebo and Yamèthin. Plague has become endemic in Meiktila district for the past many years. During the year there were 832 (1,597) attacks and 732 (1,337) deaths. As usual Mahlaing township reported the highest incidence. Immediately on receipt of reports the infected villages were visited by the Sub-Assistant Surgeons on epidemic duty and remedial measures were taken by them. Deratisation gangs were employed in Mahlaing, Sondwin, Thazi, Hanza and Thedaw villages in the latter part of the year. Some of the villagers evacuated voluntarily on the occurrence of mortality among rats but in some villages evacuation had to be enforced compulsorily. During the year 10,192 persons were inoculated against plague. In spite of the regular recurrence of plague in this district every year it is reported that the people are apathetic in submitting themselves to inoculation and that they only come forward during the height of an epidemic. In Sagaing district there were 441 attacks and 412 deaths. Of these 357 attacks and 331 deaths were reported from 32 villages in Ngazun township. Two Epidemic Sub-Assistant Surgeons were employed till April. The temporary plague staff inspected 10,319 houses, fumigated 10,740 rat holes with cyanogas and blocked 13,524 rat holes; in the process of fumigation 674 rats were noticed to come out and die. They also

inspected 12 cotton mills, 19 grain shops, 101 grain godowns and 5 bazaars with 849 bazaar stalls and these bazaars and bazaar stalls were mostly all reported to be kept in a very neglected and insanitary condition in spite of frequent reports made by the District Health Officer and his staff to the District Council. Evidently these insanitary bazaars are the main source of infection in this and other districts. The number of anti-plague inoculations performed during the year was 6,182. In Myingyan district the number of deaths recorded this year is the highest since 1918. Three hundred and ninety-eight attacks and 367 deaths were reported from 30 villages in 5 townships. Natogyi township, which was severely affected, reported 325 deaths. In Shwebo the previous year's outbreak ended in April but a second outbreak which started in July continued till the end of the year. In Yamèthin district the epidemic spread from Pyawbwè town to several villages in Pyawbwè township, the largest number occurring in the first two months of the year. Plague is apparently becoming endemic in Pyawbwè town and its vicinity.

Three other outbreaks of plague in rural areas deserve mention. Towards the end of May, large numbers of rats died in and around the bazaar quarter in Namkham village in the Northern Shan States. Though this caused mild surprise, no one suspected it to be due to plague. The first person to contract the disease was a Shan female child of 9 years and the second was her sister. Both were bubonic cases but the third and fourth cases who were the father and uncle of the child succumbed to pneumonic plague. From this house the disease spread to the whole village and caused, during the period 3rd June to 26th August, 28 attacks and 21 deaths. The bazaar was closed by the orders of the Assistant Superintendent and the accumulated rubbish of years was swept clean. The Namkham-Muse road traffic was also closed and over 5,400 anti-plague inoculations were performed. The second is an outbreak of pneumonic plague in Nyaunglebin East township in Pegu district. A Sino-Burman in Madauk village took ill on the 2nd June and died on the 6th instant. His father, who was living in Pazunmyaung village went to see him at Madauk. On his return on the 8th June, he fell ill and died the same day. The whole of his household then perished and even a Burmese *Sesaya* who attended the family contracted the disease and he and his three sons died. Another *Sesaya* from a neighbouring village who came to treat his colleague died of the disease as also his family of four. This created panic among the villagers. No rat mortality was reported from these areas. The infection was virulent and caused cent per cent mortality within 24 to 72 hours. In this outbreak 39 fatal cases were reported from five villages. The Epidemic Sub-Assistant Surgeon and the District Health Officer went to the infected villages and took all necessary preventive measures and performed over 3,400 inoculations. The third

is an outbreak of pneumonic plague at Padigon in Thegon township, Prome district. The first case was on the 12th August. Prior to his illness, this man never visited any other town or village. During his illness he was nursed by his relatives ; most of them died within a fortnight. One contact who escaped from Padigon to Tethibyin in Thegon died in the latter village and after him followed his wife and mother. All but one of the 30 cases ended fatally. A Sub-Assistant Surgeon of this Department was deputed to the two villages. He took all precautionary measures and performed 1,508 inoculations in these two villages.

The towns recording the highest rates from bubonic plague are Myingyan, Pyawbwe, Meiktila, Shwebo and Allanmyo. It is reported that in Myingyan there were 301 attacks and 302 deaths during the year. These figures show clearly that many attacks were not reported. The only cases notified were probably the dead ones or those who were expected to die. The Health Officer reports that he instructed the Public Health Inspector to prosecute some persons for failure to report cases and that the Public Health Inspector prosecuted only one person who was also acquitted by the Court of Honorary Magistrates. Unless prompt notification of cases is made to the Health Officer, it is not possible for him to take effective measures. Myingyan has not been free from plague for many years and the Health Officer had to repeatedly draw the attention of the Committee about the enforcement of the building bye-laws and maintenance of the bazaar in a more sanitary condition. Myingyan has the reputation for being one of the dirtiest towns in Burma. In Pyawbwe this is the fifth year in which plague has begun to appear with regularity. The disease often spreads from here to the villages. The bazaar has been cleaned and disinfected five times. Deratisation of the bazaar and other houses, disinfection and general cleaning were also carried out. The Deputy Commissioner, Yamèthin, remarks about this town, " All *pwees* have been stopped owing to plague at present but I fear that only a fire will effect an improvement". In Meiktila plague broke out in the first week of October, starting as usual in the quarters in and around the bazaar. With the intervention and influence of the Deputy Commissioner the Municipal Committee agreed to appoint a special plague gang and co-operate in the enforcement of the preventive measures. In Shwebo the black spot in the town as far as plague is concerned is the bazaar, and rats dead of plague were first found in it. The bazaar was closed to business for three days and was thoroughly cleaned and deratised. In Allanmyo the disease was prevalent in the first three months of the year and caused 52 deaths.

Smallpox.—The total number of deaths recorded from smallpox is only 125 and the rate 0·01 is the lowest since 1872, the first year

from which figures are available. Six per cent of the deaths in 1939 were among children under one year and 15 per cent among children between one and ten years. There was no marked seasonal variation in the incidence of the disease. Twenty-five deaths were recorded in January and 6 to 12 in the other eleven months. Nine districts reported mortality of which Akyab tops the list. The disease was seriously prevalent in Ngamaiywa, a village in Kyauktaw township of that district, where there were 53 attacks and 19 deaths in the month of January. A smallpox death which occurred in the middle of December in the previous year was not reported by the villagers and when the vaccinator went to the village they denied that the death was due to smallpox and refused vaccination. By the time the vaccinator paid his second visit after report of cases from the village the disease had fully spread. Towards the end of the year the disease was reported from a Chittagonian village in Myohaung township. It was found on investigation that though the outbreak had started in October, it was not reported till December. The vaccination staff in this large district is not enough and unless it is augmented as recommended by this Department, the district must inevitably suffer from these somewhat severe outbreaks of smallpox. In the urban areas out of 79 deaths, 68 were in Rangoon and 11 in seven other towns. There were 164 cases with 68 deaths in Rangoon town. The disease was prevalent throughout the year with rises in August, October and December.

Measures directed against Epidemic Diseases.

All the three epidemic diseases mentioned in the previous paragraphs are preventable. Modern knowledge about their causation and spread is so complete that the public health staff can hope to bring an outbreak under control with confidence if the people would follow the simple instructions given to them. By means of cinema shows, lantern talks, lectures and distribution of pamphlets the public are constantly educated as to the nature of these diseases and the various ways they can help to prevent their spread.

Cholera.—For the control of this disease the principal measures adopted are the purification of water supplies, control of the sale of food and drinks, and protection of the people with anti-cholera inoculation. The wells in the infected areas are treated with tropical chloride of lime. The outbreak of the disease is notified to neighbouring villages. Immediate burial of the dead is done under the supervision of the headman. Disinfection of infected and neighbouring houses is carried out by the public health staff with the help of coolies supplied by local bodies. Distribution of Essential oil mixture and Potassium Permanganate tablets is made to the patients and contacts.

Health talks on cholera are given and appropriate leaflets are handed round at the close of the lectures. The holding of festivals and *pwes* is prohibited as far as possible in consultation with the local authorities in the infected areas, as they are likely to aid the spread of the disease. During the year the total number of inoculations performed was 230,608 of which 169,969 were in the rural and 60,639 in the urban areas.

Plague.—Anti-plague measures may be described under two heads, *i.e.*, permanent measures intended to prevent the occurrence of plague in any area and temporary measures adopted in the face of an outbreak. By far the most important permanent measures are those which deal with the correct administration of bazaars, the storing of grain in godowns and private houses and the enforcement of building bye-laws. The neglect to keep markets in a sanitary condition often results in an enormous increase of rat population and thereafter of epizootics. This year in Namkham the rat fall in the bazaar went unnoticed and the infection spread therefrom to the whole village. In Shwebo, the rat fall was first noticed in the market which was then closed for some days and thoroughly cleaned. Again in Meiktila and in Pyawbwe towns, it is the bazaar which has acted as the focus for the spread of plague. The provision of rat-proof godowns for the storage of grain is a thing which the Municipal Committees can insist on under bye-laws for the erection and re-erection of buildings framed under section 115 of the Burma Municipal Act, and under section 137 of the Act they can frame bye-laws to regulate their actual storage. The Government of Burma have this year addressed all local bodies to emulate the example of Maymyo Municipality in the eradication of plague by adopting permanent anti-plague measures and also by taking temporary preventive measures as a routine in all the places where plague is endemic without waiting for the threatened or actual outbreak of the disease in the locality. In order to have an idea as to the kind and extent of anti-plague measures carried out in Burma, all local bodies have been requested to furnish this Department with a monthly statement showing the measures carried out in each locality for one plague season in the first instance.

Temporary measures include the destruction of rats and anti-plague inoculation. The use of Cyanogas for fumigating rat-burrows is being made extensively both in urban and rural areas for keeping under control the rat population. In Mandalay Municipality out of 113,509 premises inspected 9,308 were found to be infested with rat holes. In these premises 19,650 rat holes were cyanogassed and 47,258 connecting holes were blocked. The destruction of rats was also done by smoking and trapping. By these methods 803,991 rats were killed in Burma. The largest number, *viz.*, 610,915 is reported to have been killed in the Rangoon Corporation area. The number of anti-plague inoculations

performed during the year was 152,424 of which 72,946 were in rural and 79,478 in urban areas.

Smallpox.—The only and the most effective preventive against smallpox is vaccination. The immunity conferred by a primary vaccination wanes after a period of years, so that it is necessary for an individual to keep himself revaccinated at intervals if he is to be fully protected. The law in this country gives the local bodies power to frame rules for the compulsory vaccination of people. So far 26 out of 28 District Councils and 67 out of 77 Municipal and Town Committees have framed such rules. Even after a period of years the mortality among the vaccinated is far lower than the mortality among the unvaccinated. This may be seen from the statement of smallpox cases treated in hospitals. During the year, 157 smallpox cases were reported to have been treated in hospitals. The histories of these cases show that 75 had been vaccinated some time or other and 82 unvaccinated. The mortality among the unvaccinated was 50 per cent, while that among the vaccinated was 9 per cent. A special report showing the state of vaccination in this country is published as Appendix A to this Report.

During the year 21 cases were brought to the notice of this Department in which action was taken against the headmen and villagers for failure or delay in reporting epidemic diseases. Three headmen were imprisoned for a day without labour and fines ranging from Re. 1 to Rs. 50 were imposed on other defaulters, while a few were warned. The total number of cases of failure or delay in reporting epidemic diseases in rural areas throughout Burma is sure to be large and it is likely that the numbers reported to this Department constitute but a fraction of the total.

Minor Epidemic Diseases.

These include enteric fever, dysentery and diarrhoea, respiratory diseases, beri-beri and cerebrospinal meningitis.

Enteric Fever.—Though this disease is notifiable in all urban areas there is no true record of its incidence. Apart from admissions to hospitals the number of cases reported by private medical practitioners are few. Even in these, the diagnosis is more often based on clinical symptoms than on bacteriological investigation. The mortality figures also cannot be taken as accurate as the Medical Registrar has in most cases to rely on the history given by the relatives of dead persons and on the examination of dead bodies. Under the circumstances the figures of death under this head shown in Statement VIB (a) should be taken to indicate the relative prevalence of the disease. During the year 383 deaths were recorded in towns from this cause and the rate of 0·27 is

less than the previous year by 0·05. Very high rates have been recorded in the towns of Allanmyo 1·52, Taunggyi 1·16, Yandoon 1·01 and Zigôn 0·94.

Dysentery and Diarrhoea.—This group of diseases accounted for 6,431 deaths and the death rate 0·53 is the same as last year. The highest mortality was, as usual, recorded in the month of July but the lowest was recorded this year in the month of February. In the rural areas the districts recording high death rates are Akyab, Kyauksè, Pyapôn, Kyaukpyu and Meiktila. In the urban areas the death rate for dysentery is 0·78 and that for diarrhoea is 1·07. The towns recording high death rates from dysentery are Myitkyina, Bhamo, Myaungmya and Moulmeingyun and those returning high death rates from diarrhoea are Pyu, Mônywa, Ye-U and Magwe.

Respiratory Diseases.—The total number of deaths returned under this head is 13,292. The provincial rate 1·10 shows an improvement of 0·08 compared with the previous year and 0·01 compared with the five-year mean. The rate for rural areas is 0·28 and that for towns is 7·29. It will thus be seen that the urban rate is 26 times that of rural. It is probable that poor housing conditions in towns are more favourable to the spread of these diseases than in rural areas, where the people lead a more out door life ; but the inability of village headmen to differentiate the various diseases under this head seems also to play a big part in this divergence. In the rural areas Lower Chindwin district recorded by far the largest number of deaths, its rate being 4·09. The number of deaths recorded in towns under this head is 10,300. Of these, 4,461 are ascribed to pneumonia, 2,520 to pulmonary tuberculosis, 6 to whooping cough and balance to other respiratory diseases. The problem of tuberculosis is discussed in a later part of this Report.

Beri-beri.—Mention has been made in the Annual Reports of District Health Officers about the prevalence of this disease in certain areas. In Bhamo a fair number of deaths was noted in Shan Chinese villages and the public health staff did their best to impress on the people the importance of not eating overpolished rice or rice that had been stored for a long time. In the Upper Chindwin district 117 cases of beri-beri were treated in all the hospitals. The disease occurred mostly in the camps of Bombay Burma Trading Corporation, Limited, among employees who had to stay long periods in the jungle and depend on stocked ration. In Pyapôn district it is stated that the disease which was previously confined to Madrassè coolies has this year made its appearance among Burmans also. In Mergui district it is common especially among the labour class of Telegus. It is also

common among the Thais and Malays who live on very low and deficient diets. In Maubin district 22 deaths from suspected beri-beri were reported from Pantanaw village. In the urban areas 243 deaths were reported from this cause and the death rate of 0·17 shows an improvement of 0·16 compared with the previous year. High death rates have been returned from Mawlaik, Nyaunglebin, Kyauksè and Yandoon. Beri-beri occurred in a mild epidemic form in Syriam town, where 145 cases were treated in the hospital throughout the year.

Cerebrospinal Meningitis.—This disease was reported from two villages in Somra tract in the Upper Chindwin district. There were 11 attacks and 6 deaths in these villages. Twenty-eight deaths from this cause were reported from towns, of which 16 were in Rangoon and 4 in Moulmein.

CHAPTER IV.

The Principal Diseases, Non-Epidemic in Burma.

Malaria.—This disease forms one of the most widely prevalent diseases in this country and is responsible for a great deal of incapacitation and economic loss especially in the rural areas. It is, however, difficult to gauge its exact degree of incidence, as the registration of deaths is carried out by village headmen who are apt to include all fatal cases of malaria under "fevers". Nevertheless, spleen census taken in various parts of the province and the increasing number of malaria surveys undertaken by the Malaria Bureau have given a fair idea as to the areas in which the disease is endemic.

This year 39·82 per cent of the total mortality was due to fevers. If half the fever deaths in rural areas be taken to be due to malaria, it is seen that approximately 60,600 people died from this disease in Burma during the year under report. The following extracts are taken from the Annual Public Health reports of various districts :—

UPPER CHINDWIN.—Malaria is prevalent in the whole district, many places having a spleen index over 50 per cent. Among the notoriously malarious places are Kalemyo, Pantha, Tamu with Kabaw Valley, Indaw and Homalin. The predominant species of malaria parasite is the malignant tertian. Fatal cases of cerebral malaria and black water fever are fairly common. Free distribution as well as sale of cinchona febrifuge was undertaken during the year.

NORTHERN SHAN STATES.—The incidence of the disease transcends all others, and is the chief cause of mortality and incapacitation in the Northern Shan States. It is endemic in large tracts where conditions for the spread of the disease are favourable. Free distribution of and

sale of cinchona febrifuge tablets and treatment of fever cases at the various dispensaries in the district have been the main measures undertaken.

SOUTHERN SHAN STATES (WEST OF SALWEEN).—Malaria is prevalent in this district; the mortality from the disease exceeds that from all other diseases. Favourable conditions for the spread of malaria are present everywhere in the district. The clearing of bamboo and jungle growths in and near the villages have been carried out in some villages. Water channels are frequently cleaned and efforts made to prevent accumulation of water. Free distribution and sale of cinchona febrifuge have been undertaken during the year under report.

SHWEBO.—Malaria is the most serious public health problem in the district and large numbers of deaths are due to it every year. Kyunhla region in the north-west of the district forms the principal focus of the disease. There was a high incidence of malaria in this area as well as in Shwebo and Ye-U subdivisions during the year. Free distribution and sale of cinchona febrifuge were carried out. Larvivorous fish were introduced into ponds, tanks, lakes, streams and *chaungs* in the malarious parts of the district.

PROME.—A high incidence of malaria was reported from Prome, Padaung, Shwedaung and Thegon townships, the number of cases in rural areas attending the various hospitals and dispensaries having increased considerably. Larvivorous fish, successfully bred in the hatchery at Prome, were introduced into water collections where breeding of mosquitoes was encountered.

PYAPÔN.—Malaria is of high incidence, especially in Pyindaye Forest Reserve Area which was opened up for colonisation during the year under report. A Sub-Assistant Surgeon has specially been sent for this area and the Assistant Malariologist also visited the area. The distribution of cinchona febrifuge has been the main anti-malaria measure carried out.

LOWER CHINDWIN.—High incidence of malaria was reported from Kani, Budalin, Yinmabin and Pale townships of the district. A malaria survey of the Kani township was carried out by the staff of the Malaria Bureau during the year under report. Distribution of cinchona febrifuge has been carried out extensively.

It should be emphasised that though only the above districts have been chosen for special mention, malaria continued to be common throughout the whole country.

In the towns of Burma deaths from malaria totalled 3,029. The rate of 2·14 shows an increase of 0·03 compared with the previous

year and 0·67 compared with the five-year mean. The largest number of deaths was recorded, as in previous years, in the month of December. The towns recording the highest malarial death rates are Lashio 38·16, Shwedaung 15·94, Mawlaik 11·85, Mergui 10·68, Myanaung 9·59 and Myitkyina 8·32. In Lashio the number of deaths due to malaria is more than double than that of last year. It is the chief prevailing disease and principal cause of illness in the area. In Shwedaung the disease broke out in epidemic form during the last two cold seasons. A preliminary malaria survey of the town was made by the Assistant Malariologist in February 1939. In Mawlaik the malignant type of the fever is more common and cases of benign tertian occur only during the cold season. The Malariologist visited Mawlaik in June 1938 and suggested certain anti-malaria measures to be carried out under the supervision of a trained Sub-Assistant Surgeon. The incidence of malaria in Mergui has risen considerably last year and this year. A malaria survey would help in deciding the kind of anti-malarial measures to be adopted. In the local hospital at Myanaung 1,898 (1,643) cases were treated for malaria against 1,427 in 1937. The most dangerous source of mosquito breeding in Myitkyina is the Sitapur Nullah. This and other breeding places were treated with Malariol. Larvivorous fish were also introduced in these places.

The Control of Malaria.—Systematic anti-malaria operations were carried out in the following places :—

AKYAB.—The reclamation of the western portion of the Peeleegong brickfield was completed this year and the reclaimed area is used for industrial purposes. The reclamation of another brickfield has now been started. A big tank in a mill compound was reclaimed at the owner's expense and a fairly big tank and some lowlying areas in Umbala ward were filled up with town refuse at the expense of the owners. All important creeks in the town including the Jail creek, Julia creek, Khamaung creek and other small creeks in Lanmadaw, Singulan and Civil Station Area were cleaned and the level of the beds corrected as far as possible. Many surface drains and pools with stagnant collections of water which could not be drained were treated with Malariol. The spleen rate in the town which stood at 17·23 in 1934 has come down to 9·58 this year.

KYAUKPYU.—Almost all major anti-malaria works have been done within the Municipality during the past years. Dumping of town refuse at the swamp to the east of Kanyindaw road and at the back of *Phongyi kyaung* at No. 2 area, reclamation of a patch of land at Amarapura and filling of water-logged land near Thabanchaung were the principal measures carried out during the year. Routine anti-malaria operations like cleaning and grading of all drains, uprooting

scrub jungles and bushes, filling in of buffalo wallows, application of oil or Paris green to the breeding areas and collection of larvæ and their identification were carried out. A spleen census of 800 children in January 1940 revealed a rate of 4·25. The slight increase in the spleen rate over the previous year is probably due to the influx of people from the rural area.

MAYMYO.—The staff of one Public Health Inspector and four coolies employed on anti-malaria work was made permanent during the year and two extra coolies were sanctioned by the Municipal Committee for three months. Subsoil drains by means of bamboo pipes were provided in four places and four borrow pits, four herring-bone drains, three blind drains, seven buffalo wallows, seven pits, three pools and depressions having a total surface area of 10,400 square feet were reclaimed with town refuse and earth. Naturalistic method of malaria control by dumping green leaves in selected areas was carried out and their effect on carrier anophelines was closely watched. Larvivorous fish numbering 159 were introduced in wells, ponds and small drains and spraying of malariol and dusting of Paris green were also done. During the year 1,204 houses were inspected and 1,771 adult culicine mosquitoes and 71,264 culicine larvæ were caught and destroyed.

LASHIO.—Though the death rate from malaria in this locality has doubled, the benefit derived from the anti-malaria measures carried out in the town is apparent, when the spleen rate in the protected area where anti-malarial operations are carried out, is compared with that of the unprotected area, where no such measures are in operation. The spleen rate in June 1939 in the protected area was 12·78, while that in the unprotected area was 45·57.

Anti-malaria operations on a minor scale were carried out at Sandoway, Bhamo, Myitkyina, Shwedaung, Prome, Syriam, Henzada and Salin.

A mosquito survey was carried out in Maubin town and an Anti-Mosquito Committee has been formed with the Deputy Commissioner as its president to carry out the recommendations contained in the survey report. Malaria surveys were conducted in Yamèthin township, Kani township, Kawlin, Môgok and Popa villages and in Shwedaung town and 1st and 2nd Battalion Military Police Lines in Rangoon. A mosquito survey was also carried out at the Mingaladon aerodrome.

Malaria Control by Fish.—Mention has already been made in previous annual reports about the introduction of larvivorous fish into tanks, ponds, wells and drains as a measure for minimising the mosquito nuisance. During the year 1,111 larvivorous fish were distributed from the central hatchery at the Harcourt Butler Institute

of Public Health, Rangoon, to subsidiary hatcheries in various districts for breeding purposes. Additional subsidiary hatcheries have been constructed at Bhamo, Pyapôn, Hlègu (Insein district), Katha, Sandoway, Taunggyi, Salween, Kungyangôn (Hanthawaddy district), Moulmein and Mawlaik and the total number of these now comes to 26. From the subsidiary hatcheries the public health staff took out the fish for introducing them into ponds, tanks, wells and other places in both urban and rural areas.

Free Distribution of Cinchona Febrifuge Tablets.—By the end of 1938 free distribution of cinchona febrifuge tablets on an extensive scale came to an end and under the revised orders the tablets can be distributed only to actual sufferers in villages where the people are so poor as to be unable to buy them or in areas where there are widespread attacks of malarial fever. Consequently the number of cinchona febrifuge tablets distributed free during the year has come down from 10,328,490 in 1937 to 3,639,348 (8,449,380) this year. The districts reporting large free distribution are Southern Shan States, Myitkyina, Northern Shan States, Bassein, Katha, Yamèthin and Bhamo. It was expected that as a result of the extensive free distribution made in the past three years the people will begin to appreciate the value of the drug as a preventive and cure for malaria and come forward to purchase the drug in larger numbers. The sale of cinchona febrifuge tablets from treasuries has increased from 4,086,720 tablets in 1937 to 5,682,240 tablets (4,564,260) this year thereby indicating that people are more and more appreciating the value of the drug. The districts in which large sales of cinchona febrifuge tablets are reported are Henzada, Northern Shan States, Southern Shan States, Pegu, Toungoo, Bhamo and Amherst. The average consumption of cinchona febrifuge has come down from 4.04 grains in 1937 to 2.00 (3.65) grains per head of population this year. The largest *per capita* consumption, *viz.*, 14.60 grains was in Bhamo district followed by 12.26 grains and 6.23 grains in Myitkyina and Salween districts respectively. In Shwebo district, where the highest fever death rate of 19.80 has been recorded the *per capita* consumption was 1.50 grains only.

Venereal Diseases.—As mentioned in the previous year's report the data available for gauging the incidence of this group of diseases are meagre. During 1939 84,208 persons were treated in hospitals for venereal diseases, of whom 39,791 were suffering from syphilis and 29,458 from gonococcal infection, the remainder having other diseases of venereal origin. The number of deaths that took place in hospitals from syphilis and gonorrhoea were 61 and 12 respectively and the number of deaths that were recorded in towns on account of

these two conditions were 246 and 11 respectively. In the Rangoon General Hospital out of 763 post mortem examinations performed pathological signs of syphilis were noticed in 65 cases. The blood examination of 2,104 women admitted into the four centres maintained by the Maternity and Infant Welfare Society, Rangoon, revealed evidence of venereal infection in 857 cases. These are not admittedly sufficient for drawing any conclusion. The experience of the medical profession, however, is that these diseases are prevalent in this country. The universal complaint is that patients seldom undergo the full course of treatment. As soon as the external symptoms disappear, many stop treatment with the result that they go on infecting others, little realising that they still have the disease in them. The costliness of the drugs used for the treatment of these diseases impels many to go to quacks who by promising quick cure with secrecy, manage to reap a good fee, with little or no relief to the patients. Facilities for the treatment of venereal diseases among seamen are provided at the Ramakrishna Mission Seva Ashram and at the General Hospital Rangoon and at the General Hospitals in Bassein, Akyab and Moulmein. Pamphlets telling where a venereal clinic is to be found and stating the hours of treatment are distributed by the Port Health Staff to the native as well as the European crew entering Rangoon Port. The Hygiene Publicity Bureau of this Department supplied 18,260 pamphlets dealing with venereal diseases to District and Municipal Health Officers and others for distribution to the public.

Leprosy.—The number of deaths ascribed to leprosy in towns during 1939 is 365, the rate being 0·26. A perusal of Statement VIB (a) in Volume II of this report will show that the largest number of deaths have been recorded in Rangoon and Mandalay. The presence of leper asylums in these towns, which attract lepers from all adjoining districts no doubt accounts for the greater mortality. Though the disease is notifiable in Maymyo and Môngywa Municipalities no complete list of lepers in these two areas is available. The time does not, however, seem to be ripe for legally enforcing the responsibility of the people to report cases in these towns. In the rural areas of Burma, even mortality figures are not available.

Colonies for housing, isolation and treatment of lepers continued to flourish at Môngywa, Minbu, Meiktila, Sale, Magwe, Shwebo and Nyaunglun. In the Federated Shan States nine colonies were run by the American Baptist Mission and two by the Roman Catholic Mission. A new colony was started during the year at Saththadaw village in Insein district and proposals are on foot for establishing colonies at Bhamo, Thayetmyo, Nyaung-U, Thatôn, Pakôkku and Henzada. Many of the colonies have clinics attached to them in which leper patients both indoor and outdoor are treated by specially trained doctors on

specified days every week. In the Môngywa colony there were 90 old patients from the previous year and nine new admissions, of whom five were discharged as burnt out cases and seven died. The inmates were kept busy on cultivation and kitchen gardening in the adjacent land. In the Minbu colony there were 37 in-patients remaining from the previous year and 21 new admissions but only 36 remained at the close of the year. The nature of occupational therapy employed was gardening and cleaning their own barracks and compound of the colony; all who were fit were employed for two hours in the morning and two hours in the evening. The management of the Shwebo Leper Colony through lack of financial support could not accommodate more than 50 to 55 lepers. There were 50 inmates in the colony at the close of the year. A small amount of cultivation was done by the inmates but on account of the sandy nature of the soil it was not successful. The numbers of inmates remaining at the Meiktila, Magwe, Sale and Nyaunglun colonies at the end of the year were 24, 39, 12 and 50 respectively. On the 1st of December this year the management of the American Baptist Mission Central colony at Kengtung was taken over by the Kengtung State. The number of residents in the other colonies run by the American Baptist Mission in Kengtung subdivision was 858. In the leper colonies of the Roman Catholic Mission at Kengtung and Loilem there were 119 and 107 inmates respectively at the close of the year. Clinics for the out-patient treatment of lepers were run in 35 places and the number of patients treated at these clinics totalled 5,306. The British Empire Leprosy Relief Association made capitation and special grants to the extent of Rs. 4,351 to leper colonies. The Burma Tuberculosis and Leprosy Relief Association offered contributions to five mofussil associations for the purpose of constructing additional huts in their leper colonies, on condition that the local associations were prepared to meet the extra expenditure on account of maintaining the additional lepers from their own resources. Only the Yamèthin Tuberculosis and Leprosy Relief Association agreed to this condition for its Nyaunglun colony and was paid Rs. 1,750. The Central Association also decided to allot Rs. 750 each to six local societies and Rs. 250 to a seventh society if they agreed to affiliate with the Central Association and report to it their progress and work. It is learnt that excepting the Insein Society, none of the others applied for the grant. The Central Association also paid a grant of Rs. 1,000 for the establishment of a leper colony at Pakôkku and Rs. 630 for the construction of a leper clinic in the Yamèthin Hospital compound.

This Department took action during the year to implement the recommendations made by Dr. J. Lowe in his report. Two nominees of the Executive Committee of the Burma Tuberculosis and Leprosy Relief Association, two nominees of the British Empire Leprosy Relief

Association, Burma Council, and two nominees of Government, *viz.*, the Inspector-General of Civil Hospitals, Burma, and the Director of Public Health, Burma, who constituted the *ad hoc* committee to study Dr. Lowe's Report have been constituted into a permanent Leprosy Advisory Board with the Special Leprosy Officer, Burma, as its Honorary Secretary to act as a consultative body on the subject of leprosy. Arrangements have been made for the further study of the problem of leprosy in Burma by carrying out four limited but intensive surveys in Upper, Middle and Lower Burma and the Tenasserim area, the Special Leprosy Officer being assisted in this work by one or more of the Epidemic Sub-Assistant Surgeons trained for the purpose and posted temporarily to do duty with that officer. Each survey is scheduled to last about two months during the course of which at least 20 villages will be surveyed in each area. In the sample villages chosen, examination will be made as far as possible of every man, woman and child, paying particular attention to the detection of slight cases especially in children. With the co-operation of local officers two such surveys have already been made this year. A review of the findings will be made after the other two surveys have been carried out in the ensuing year. Government have also accepted in general principle the recommendation of the *ad hoc* committee that the Burma Tuberculosis and Leprosy Relief Association should purchase and equip a motor car to be used as a travelling clinic in highly infected areas subject to Government providing a Sub-Assistant Surgeon of the Public Health Department to run the clinic as well as carry out the associated educative propaganda and follow up work. The other recommendations contained in Dr. Lowe's Report, such as the entertainment of whole-time Superintendents for the three leper colonies at Mònywa, Shwebo and Meiktila, the amendment of rules under the Burma Village Act to allow segregation of lepers within villages and others are under correspondence with Government.

The Special Leprosy Officer conducted his annual course of lectures and demonstrations in leprosy to the senior students of the Medical College and Medical School in November 1939. Two courses of training in diagnosis and treatment of leprosy lasting for 21 days each were conducted by him at the Harcourt Butler Institute of Public Health, Rangoon, and nine Sub-Assistant Surgeons of the Medical Department were trained in such courses. Seven Sub-Assistant Surgeons of the Public Health Department were also trained by him in leprosy work during the year at Yamèthin, Sagaing and Henzada districts while carrying out the intensive surveys mentioned above. Lectures on leprosy were delivered by him at the Teachers' Training College, the Physical Training Camp (at Cabin Island) and at the Public Health Inspectors' class. In addition to the propaganda on

leprosy in the villages where surveys were carried out, he delivered lectures with magic lantern demonstrations at the Shwemawdaw Pagoda festival at Pegu and at the Rural Uplift Vacation School at Meiktila. He inspected three leper asylums, three colonies and six leprosy clinics during the year. He also visited Thatôn, Henzada, Thayetmyo and Pakôkku with a view to advise local associations or authorities on the selection of sites and the lay-out of colonies, etc. During the year a total of 34,628 copies of pamphlets on the subject of leprosy in English and Burmese were issued by the Hygiene Publicity Bureau.

Seventeen lepers are reported to have arrived at Rangoon port, of whom two were sent to the Leper Asylum, 12 were allowed to go to their residence and three were left on board, being through passengers.

Eye Diseases.—Eye complaints such as trachoma and conjunctivitis are reported to be very common in Thayetmyo, Magwe, Lower Chindwin, Upper Chindwin, Northern Shan States, Bhamo, Shwebo, Minbu and Myingyan districts. Arrangements have been made for storing eye lotion tablets in 27 treasuries. The number of packets issued from these treasuries for free distribution is 558.

Tuberculosis.—Deaths from tuberculosis are recorded only in towns, while in rural areas they are classified under deaths from respiratory diseases. Out of 2,766 deaths from tuberculosis recorded in towns 2,520 were ascribed to pulmonary tuberculosis, 14 to tuberculosis of joints and the rest to other tuberculous diseases. The death rate from pulmonary tuberculosis is 1.78. This rate shows a drop of 0.17 compared with the previous year but is in excess of the five-year mean by 0.06. Comparatively high rates from phthisis are recorded in Myitkyina, Danubyu, Myaungmya and Mergui towns probably due to unsatisfactory housing conditions in these towns.

The tuberculosis dispensary maintained by the Rangoon Corporation continued to attract an increasing number of patients. The attendances at the dispensary rose from 34,206 in 1938 to 38,039 this year, of whom 4,927 were new patients. Amongst these, 934 were diagnosed to be suffering from pulmonary tuberculosis, 34 from glandular tuberculosis, 14 from tuberculosis of other organs such as Tuberculosis Peritonitis, Tuberculosis Spine, etc., and the remainder from other diseases. Of the patients suffering from pulmonary tuberculosis, 7 were in the first stage, 24 in the second and 903 in the third stage of the disease. The Medical Officer of the dispensary and the nurse made 1,459 and 1,954 separate home visits separately. Each patient was visited once a month as a rule except in the case of serious and bedridden patients who were visited more than once as considered

necessary. The Health Officer remarks, "It is regrettable that only 258 or 16·28 per cent of the contacts out of the total of 1,585 came to the dispensary and availed themselves of the advice for examination". Of the 258 contacts examined 10 or 3·88 per cent were diagnosed to be suffering from pulmonary tuberculosis.

Professor S. Lyle Cummins, C.B., C.M.G., LL.D., who came to Burma to advise the Burma Tuberculosis and Leprosy Relief Association on the measures necessary to control tuberculosis in Burma spent six weeks in Rangoon studying the conditions in the City and its environs, visiting hospitals and performing tuberculin tests on school children and others. In the subsequent six weeks he inspected important places in Burma such as Mandalay, Shwebo, Kyaukse, Maymyo, Myingyan, Thayetmyo, Akyab, Moulmein, Bassein and Prome, studying housing conditions in each place, performing tuberculin tests and judging the suitability of sites for sanatoria. He has furnished the Association a very valuable report, recording his impressions and suggesting the lines of action to be taken. As a result of tuberculin tests made on over 9,000 people the Professor remarks that the incidence of infection is very low in Upper Burma, low in Lower Burma and that only in Rangoon its incidence is high. In Rangoon though the exposure to infection is as high as in England, the deaths are about four times as high, which would indicate that the people here are far from being as well able to resist the infection as the people in England. The mode of infection is chiefly respiratory. Housing conditions are such as to favour the spread of infection. The great need is for somewhere to place persons suffering from tuberculosis. An *ad hoc* committee of the Burma Tuberculosis and Leprosy Relief Association considered Professor Cummin's Report and on its recommendation the Executive Committee of the Association has decided to make an offer of Rs. 2½ lakhs to Government towards the construction of a tuberculosis hospital in or near Rangoon requesting Government to share the rest of the cost of construction and charges for equipment, maintenance, etc., with the Corporation of Rangoon.

Yaws.—The annual public health reports from districts reveal that campaigns for the treatment of yaws have been initiated by the Medical Department in a number of places. In the Upper Chindwin district the disease is very common in certain areas. A special Sub-Assistant Surgeon was sanctioned to carry out the campaign for six months in a year and the work was commenced from July 1937. During the year under review, he treated 2,173 cases in the six months from January to April and November and December, the total number of cases treated since the commencement of the campaign being 10,210. In the Lower Chindwin district, a special Sub-Assistant Surgeon was posted to Kani township for this duty. It is stated that the villagers

who suffer from this disease come forward willingly for treatment. Free treatment to yaws cases was given by a Sub-Assistant Surgeon specially deputed for the purpose for six months in Katha district. He has been engaged in the work since November 1939 and was still touring the district at the end of the year. Treatment campaigns were also carried out in Mandalay and Tavoy districts by a special Sub-Assistant Surgeon posted to each of these districts. In the Mogôk subdivision in Katha district the Sub-Assistant Surgeon in charge of the travelling dispensary at Kyannyat was supplied with drugs for the treatment of yaws cases. In Bhamo district the endemic area for yaws is along the Kaukkwe stream. This area was visited by a Sub-Assistant Surgeon of this Department who treated 15 cases. A small focus of yaws was found at Thityabin in Kanbalu township, Shwebo district. A treatment campaign was conducted by the District Health Officer between the 5th August and 14th September, during which period 147 patients were treated.

Goitre.—This disease is widespread in certain parts of the Northern Shan States. Kachins and Palaungs suffer severely. In some villages everyone has an enlarged thyroid gland. The Sub-Assistant Surgeon in Medical charge of the Burma Frontier Force column in the Southern Shan States east of the Salween has reported that during the course of his tour he noticed many goitre cases. In Pakôkku district it is common in the hilly tracts in Saw, Gangaw, Tilin and Pauk townships but very few people come for treatment. In the Putao subdivision in Myitkyina district the disease is common among the hill tribes but most of the inhabitants are reported to take it more or less as a natural phenomenon. In the Upper Chindwin district it is very prevalent in Mingin, Kalembo and Paungbyin townships. Cases have also been noticed among the hill Karens in Salween district and among the villagers in Salin township in Minbu district. Towards the end of the year the Government of Burma deputed Captain R. L. Raymond, I.M.S., to conduct a survey of the incidence of goitre in the Chin Hills district, to investigate the causes of the disease and to report on the medical needs of the district. Two Sub-Assistant Surgeons of this Department were deputed to assist this officer in the survey. The Inspector-General of Civil Hospitals, Burma, has addressed the Civil Surgeons in nine districts, where goitre is known to be prevalent, to commence treating all school children by giving them half a grain of potassium iodide in solution twice a month. The Medical Officers in charge of the hospitals in the above districts were advised to carry out a census of the children attending schools in their areas to estimate the incidence of goitre and the Civil Surgeons were requested to enlist the co-operation of the administrative and educational authorities in bringing the scheme into operation.

CHAPTER V.

Urban Sanitation.

General.—Under the Burma Municipal Act the responsibility for looking after the sanitary conditions in a town rests upon the local Municipal Committee. Powers of entry and inspection have been given to Municipal Officers to see that the provisions of the various sections of the Act and the bye-laws thereunder are being observed. Model bye-laws on different subjects have been drawn up by Government and these have been adopted by nearly all Municipal Committees. So far the position is alright, but when the working of the Act and the bye-laws is looked into it is seen that far too often for one reason or another action is not taken for their enforcement. The majority of Municipalities have no whole-time Health Officers. The only rational course for them to adopt is to co-opt the local Government Medical Officer as a member of their Committee and delegate to him the powers of the Health Officer under section 31 (1) (e) of the Act. A number of committees are unwilling to do this. Service as a whole-time Health Officer in the few larger municipalities which can afford the appointment is not popular. There is an uncertainty of tenure. The powers of appointment and control over the Health Officers have been left almost entirely to the Municipal Committees. Health Officers find that it is difficult to carry out their duties efficiently and at the same time be popular with all the Municipal Commissioners. If they go against the wishes of the majority in the Committee in power, they are likely to jeopardise their appointment. These Health Officers do not obtain enough co-operation and support from their Committees and so cannot take action which may be unpopular but necessary to enforce the laws and bye-laws already passed by the Committee. The Government of Burma has been approached to provincialise the Municipal Health Officers. In fact three municipalities have Government Health Officers as they have not been able to recruit suitable Health Officers for themselves. Owing to the war this scheme has been kept in abeyance.

The public health staff employed in towns are shown in Statement B at the end of this Report.

Water Supplies.—There was nothing new or outstanding to be recorded on the subject of water supply in towns during 1939. The war has made the cost of plant, pipes and other materials to rise. The stocks of chlorine, which is essential for the purification of water supplies were irregular after the commencement of hostilities but supplies appear to be coming regularly now. The last of the big water supply schemes sanctioned by Government was a contribution equivalent to

two-thirds of Rs. 1,69,000 towards the cost of further improvements to the existing pipe water supply scheme of Akyab Municipality. The Municipal Committee proposes to increase the storage capacity of the existing reservoir by raising its bund by a foot and thus impound additional water sufficient for about 30 days' consumption in the town. Thayetmyo, Magwe and Prome are the three other places where it has become increasingly necessary to improve the water supply. Situated as these towns are on the banks of the Irrawaddy, the question as to whether river water instead of water from tube wells could not be used as their source of supply was considered. The engineering problems connected with the utilisation of river water and also the comparative cost of pumping river water instead of the tube well water were gone into. The indications are that the cost of pumping and purifying river water, would be greater than pumping tube well water and supplying it to the townspeople direct. As no funds are available for carrying on big schemes, this question has at present only an academic interest. The Municipal Committee, Bassein, has earmarked a sum of Rs. 75,000 for carrying out a partial water supply scheme. It is not known when it will be carried into effect.

Conservancy.—The removal of rubbish and excreta is one of the primary functions of municipalities. For carrying out this object Municipal Committees have to maintain an adequate staff and equipment. To be efficient the work has to be done departmentally under the supervision of the Health Officer for which adequate powers should be delegated to him for appointment, punishment, removal, etc., of sweepers under section 31 (1) (e) of the Burma Municipal Act. This is quite essential, if efficient work has to be got out of these menials. In Prome where the removal of night soil was done on contract, the Health Officer remarks, "Though the work continued to be somewhat fair in the dry months, it becomes absolutely bad during the rains, a considerable number of areas being conserved on alternate days or once in three days' time. This was due to the fact that most of the carts with which the work was started the previous year, being old, went out of order and they were neither repaired nor replaced and some of the mehters were retrenched as well, as the contractor was not sure of the future work". The Allanmyo Municipal Committee purchased a two ton Chevrolet lorry and a bullock cart and started the removal of rubbish on departmental system from the 1st July. The annual public health reports reveal that the contract system for removal of rubbish was in force in Toungoo and Thayetmyo, for the removal of excreta in Prome, Shwedaung and Allanmyo and for the removal of both rubbish and excreta at Mawlaik. These municipalities should be urged to do away with the contract system and to revert to departmental system.

Motor transport was introduced for the removal of night soil in Pegu Municipality. In Nyaunglebin where the motor transport for the removal of rubbish and excreta required renewal, the Municipal Committee has decided to purchase bullock carts with pneumatic tyres instead. A dumping tank for the disposal of night soil into the creek during the ebb tide has been completed at Thôngwa but it has not yet been handed over to the Committee. Proposals for dumping the night soil into the river are also under consideration of the Municipal Committee, Insein. A survey for the preparation of the preliminary estimate is in progress. The Municipal Committee, Pyapôn, is now considering a preliminary estimate amounting to Rs. 18,600 for a night conservancy scheme with double buckets. The Health Officer, Pyapôn, remarks, "Until the night conservancy scheme is brought into operation no efficient control can be exercised over the collection, transport and disposal of the night soil. The private sweepers at times throw the night soil in drains and back lanes. Three sweepers were prosecuted; one was fined Rs. 30 and another Re. 1 and the third was dismissed. This causes great nuisance and it is difficult to apprehend the culprits." Before introducing any night conservancy scheme it is essential that the latrines in the area are provided with pucca seat and floor and the conservancy lanes are metalled and kept under repair so that the collection of excreta may be made easy to the conservancy staff.

Generally, it may be confidently asserted that the disposal of night soil and removal of rubbish in practically all towns in Burma is not satisfactorily carried out.

Markets.—The sanitary condition of many of the markets in Burma was so bad that it evoked criticism from the Royal Commission on Labour which visited this country in the year 1930. Government thereupon issued instructions for all the markets to be inspected and recommendations made as to the measures necessary for their improvement. As local bodies in Burma were the owners of markets in most places, they were advised to give effect to the recommendations of the inspecting officers as far as their funds permitted. An insanitary market acts always as a centre for the dissemination of plague, as it is in these markets that rat epizootics first start and go unnoticed. The efforts made by Municipal and Town Committees to improve their bazaars have been described in previous annual reports. The principal measures carried out during 1939 were the following :—

In Akyab tea and eating stalls in O line in the Myoma Bazaar were thoroughly reconstructed. A new open shed was built in the fish market and patch repairs were carried out in the stalls and foot paths. The sanitary condition of the Municipal Market, Toungoo, has been considerably improved by tarring many of the foot paths around the stalls. An open tray sellers block has been completed during the year

and two blocks are also in course of construction. In Ngathainggyaung, a new fish bazaar was constructed and in Myanaung a fly proof beef stall was erected and repairs were carried out to the floor of the rice stalls. With regard to the Yandoon bazaar, the Commissioner, Irrawaddy Division, remarks, "In consequence of the bazaar strike which occurred in the early part of the year the Committee took the opportunity of carrying out extensive repairs to the old bazaar, the expenditure of over Rs. 10,000 being met out of the Building Fund". In Mònywa out of the loan of Rs. 1,00,000 sanctioned by Government for the renewal of the market, it is reported that a sum of Rs. 9,201 has already been drawn and disbursed to the Contractor. The erection of block II consisting of 144 stalls was put in hand during the year. The construction of the new market at Mergui is nearing completion. The first two sections of the new building have already been completed and rented out.

In many towns in Burma proper attention is not paid to the bazaars. They are not properly cleaned and encroachments are allowed to take place and effective deratisation measures are not undertaken. These points are repeatedly commented on in inspection notes by officers of this Department.

Rural Sanitation.

General.—Plots of land in villages not exceeding one quarter of an acre each in extent occupied by or appertaining to buildings are exempt from assessment under Direction No. 45 of the Burma Town and Village Lands Directions, 1913. A quarter of an acre is a plot of land measuring roughly 50' by 50'. The house of an average villager is not likely to occupy more than half of this plot. The rest is intended for such use as the villager may put to his greatest advantage. Rural uplift workers and others interested in the welfare of the villagers may well pause over the following remarks of the District Health Officer, Minbu, which gives indications as to the way in which vacant land near houses or buildings may be utilised:—"The question of provision of plenty of green vegetables and fruits containing vitamins and minerals, should not be difficult in the Tropics, if the people will only work a little bit more to rear vegetable and fruit gardens. If the importance of daily consumption of milk is brought home to the Burmese people and they will take to rearing of cattle, not only for draught and ploughing, but also for dairy purposes, the question of well-balanced food will also be solved. It looks to me if the above simple facts are brought home to the people and facilities given to act up to it, there will be a great improvement in the health of the Nation."

The public health staff employed in the rural areas are shown in Statement B at the end of this Report.

Water Supplies.—The sources of water supply in the rural areas are wells, tanks, rivers and *chaungs*. Considering the fact that the Irrawaddy and its tributaries and the Salween act as the main waterways for Burma, it is but natural that their water should get polluted with emanations from travellers plying their craft over them. These rivers and *chaungs* act also as the main sewer for the villages on their embankments. It is during an outbreak of cholera, that the danger of the spread of infection along the water courses becomes very great. At that time people are warned not to drink river water on account of the risk of cholera infection. Wells and tanks, if properly maintained, are not open to this danger, but the habit of the people to bathe and wash clothes on the edge of wells, especially used for drinking purposes, is one which the headmen should strive to put a stop to. Tanks should also be fenced and protected from human and animal contamination. During cholera epidemics the villagers are advised to drink boiled water only. Except in the Dry Zone, the quantity of water available is generally sufficient. Wells are reported to have been sunk in a number of villages with the help of contributions from the Deputy Commissioner's discretionary grants. Two new tanks were dug in Hanthawaddy district at Sagaingmut and Tetthit villages. The District Council, Bassein, which owns a set of implements for boring tube wells, constructed one tube well at Athok, one at Hleseik and two at Thaunggyi villages during the year. Minor improvements to wells and tanks are reported from Akyab and Myaungmya districts.

Conservancy.—The duties of persons residing in a village-tract in respect of public nuisances and sanitation are specified in the rules framed by Government under the Burma Village Act. Among other things, these rules lay down that no person residing in a village-tract should allow any house or land occupied by him to be kept in a filthy or insanitary condition or overgrown with weeds and rank vegetation and that no person shall deposit rubbish elsewhere than at the place marked out for the purpose by the headman. The cleanliness of a village generally depends upon the personality and influence of the headman. If he is energetic and has a sense of neatness, he will persuade his villagers to keep their houses and compounds clean and have the streets and lanes in good order. In the generality of cases, however, it is reported that the streets and houses are cleaned only during the outbreak of epidemics or when the Deputy Commissioner, Subdivisional Officer or other important administrative official is about to pay a visit to the village. The Deputy Commissioner, Tharrawaddy, in writing about the general sanitation in villages remarks, "With cattle and pigs, which are indispensable to village life and are bred in scores in most villages, we cannot expect to do much in the matter of village sanitation. Few animals are kept in properly constructed sheds or

sties and their refuse is dumped at the back of the houses thereby encouraging flies and mosquitoes. Although during the dry weather most of the villages are reasonably clean, they mostly degenerate into *bwets* during the rains. It is an uphill struggle to make any improvement in village sanitation. The chief reasons are the comparative poverty of the villagers combined with a lack of interest in public health matters. Some villages are noticeably clean. A good headman and a sandy soil are the two deciding factors." In some of the big villages in the district, the local bodies employ a staff of sweepers and mehters to keep them clean. Pit latrines are in use in a small number of houses in the village and the majority of the villagers resort to the nearest field or jungle to evacuate. Bored hole latrines are reported to have been installed in Daga bazaar and in Inma village in Bassein district. Experiments on the utilization of habitation wastes by what is known as the Indore process were still in progress in Maymyo town. In the Hlegu Health Unit the manufacture of agricultural manure by composting was attempted. The work is still on the experimental stage.

Rural Health Unit, Hlegu.—Through the Rural Health Unit, Hlegu, the Public Health Department is endeavouring to demonstrate to the people of this country how much the health conditions in rural areas could be improved if only a reasonably adequate staff and equipment were provided. The Unit is also made use of as a practical field training centre for public health personnel. The activities of the Unit embrace the collection and study of vital statistics, control of acute epidemic diseases, health education, school medical inspection, maternity and child welfare work, waste removal, improvement of food establishment and water supplies, etc. A whole-time Health Officer was appointed for the Unit from the 8th May 1939. The staff consisted, as in the previous year, of two public health inspectors, four midwives, one health visitor, one clerk, one store-keeper, one vaccinator, one lorry driver and one peon. It is now ten years since the Unit was started and during this period it may be safely asserted that the outlook of the people towards personal and environmental sanitation has undergone a change for the better and the fatalistic attitude of the villager that epidemic diseases like plague, cholera and smallpox appear only to be endured, has gone.

The birth rate this year, is 36·76 (35·78), which is 0·36 in excess of the five-year mean. The death rate is 20·68 (22·87) which is 0·53 less than the five-year mean. The mortality rate of infants under one year is 153·66 per 1,000 live births. There were 74 still-births and 19 deaths of mothers during child birth, the rates being 2·96 per 100 and 7·60 per 1,000 live-births respectively. A birth certificate of attractive design was issued to every parent or guardian reporting a birth and

this has encouraged the reporting of births. The public health staff verified the accuracy of the entries in the headman's birth and death registers and in the course of verification detected 48 omissions of births and 6 of deaths and suitable action was taken against the defaulters for infringement of the registration rules. The vital index of the township was 177.74.

The state of health during the year was very satisfactory. Except for a few isolated cases of smallpox, the township was free from epidemic diseases. The number of persons vaccinated against smallpox during the year was 8,640 and the total number performed since the inception of the Unit was 66,840. When a detailed survey was carried out to ascertain the true state of vaccination the protection enjoyed by the people in a certain number of villages was found to be unsatisfactory. Vaccinations and revaccinations on an intensive scale were then performed in these villages.

The education of the people in all matters pertaining to health is one of the main functions of the Unit. During the year a total of 348 lantern talks, cinema shows, lectures to public, conferences and school talks were made with an approximate attendance of 28,888 people. These lectures and talks were supplemented by the distribution of 6,200 printed publications on various public health subjects. A miniature health exhibition was held in Gamu village in the first week of May 1939.

As in previous years the Unit conducted Infant Welfare and Ante-natal Clinics at Hlegu and Dabein. There were 155 of the former and 103 of the latter with a total attendance of 2,726 children and 430 expectant mothers. The health visitor, besides supervising the work of the midwives, paid 2,995 home visits to children and 812 visits to expectant mothers. The four midwives conducted 419 deliveries and performed 2,491 ante-natal and 3,037 *post partum* visits. A new Child Welfare Centre was opened at Yemun in the last quarter of the year. Minor ailments were attended to at the Child Welfare Centres, where 2,537 persons were treated.

There were 10 school inspections carried out during the year and 928 pupils physically examined. Of these 497 or 53.56 per cent were discovered with one or more defects. Minor ailments were attended to on the spot and where applicable, others were referred to the local hospital.

Treatment clinics for lepers were held twice a week at Hlegu and once a week at Dabein with a total attendance of 750. Thirty-four new cases were admitted at the two centres. New cases were followed up by the staff of the Unit for examining the contacts and relatives.

In the laboratory of the Unit 161 specimens of urine from expectant mothers, three specimens of faeces, seventeen blood smears for malaria

and ten sputums for tuberculosis and two smears for gonococci were examined during the year. A total of 2,231 persons were treated for round worm infection with oil of chenopodium and 97·03 per cent of the cases in which the results were known were relieved of the infection.

The staff of the Unit conducted a routine examination of the wells and tanks used for drinking purposes in the villages. In the course of inspection many of the tanks were found unprotected, with evidence of cattle gaining access into them. Arrangements have been made towards the close of the year to protect five tanks with barbed wire. During the year 519 inspections of tanks and wells were made and as a result 68 wells and 17 tanks were satisfactorily improved and 19 wells were chlorinated. A new tank was under construction at Gyongyongya village with the help of a contribution of Rs. 270 from the Deputy Commissioner's Discretionary Grant, for which the villagers are contributing an equal amount in the shape of labour. Ninety-seven bored hole latrines were installed in Hlegu Health Unit area and in the Insein district. The system of part payment towards the construction of these latrines is becoming more regularised and is not meeting with any objection among the villagers. Inspection of latrines was made on 832 occasions and 16 surface and 36 bucket latrines found defective were improved. Experiments were in progress on the manufacture of humus in brick-lined and ordinary pits. As in previous years refuse disposal was carried out by means of the motor lorry at Hlegu and Dabein wherefrom 1,199 lorry loads of refuse were removed to the dumping grounds.

A total of 1,032 inspections were performed in connection with tea and coffee shops, eating houses, meat stalls, fish stalls, vegetable stalls, pig sties and cattle sheds. On 176 occasions defects were noted and improvements suggested. In addition to the above 4,040 inspections of premises and school buildings were performed and the defects discovered were rectified. Twenty-nine new building plans were received and passed with minor alterations.

During the year field training in public health work was given to three Assistant District Health Officers, five Sub-Assistant Surgeons undergoing training for the Government License in Hygiene, two Sub-Assistant Surgeons newly recruited to this Department, and two Public Health Inspectors in service for their efficiency bar examination. Since its inception, the Unit has undertaken the practical field training of 267 public health personnel.

Rural Uplift Centre, Tatkon.—It will be recalled that the Health Centre at Tatkôn was started by the Government under the Rural Uplift Scheme in July 1936. The idea behind the scheme is that the villagers should through demonstration and propaganda be made to realise the various ways in which they can improve their economic and

and health conditions. A number of Government Departments such as the Agricultural, Veterinary, Co-operative, Education, Medical and Public Health have chalked out their programmes of work at the centre to achieve this object. As far as the Public Health Department is concerned the activities of the centre cover the whole of Yamèthin township which according to the 1931 census has a population of 81,189 with an area of about 1,080 square miles. As was mentioned in the previous year's report a great deal of the efforts of the Health Centre has to be concentrated on the major public health problems in the township, *viz.*, malaria, leprosy, and water supply. In addition, all the usual sanitary measures carried out in a health unit such as the organization of village clean up drives, the construction of bored hole latrines and compost pits, vaccination campaigns, maternity and child welfare clinics, school medical inspection and the education of the population in matters of hygiene have to be attended to.

The birth rate of * 48.54 this year (51.82) is 5.44 higher than the five-year mean. As in the previous two years a birth registration certificate of attractive design was issued to every person reporting a birth. The death rate of * 35.04 (36.21) shows a rise of 7.35 over the five-year mean. The health staff inspected the registration of births and deaths in villages and in the course of such inspections detected 51 omissions of births and 11 of deaths. The vital index of the township for the year was 138.52. The infant mortality rate is 252.72, which shows a welcome drop of 47.25 compared with the previous year. There were 35 still-births and 28 deaths of mothers due to child birth, the rates being 0.89 per hundred and 7.10 per 1,000 live-births respectively.

Health conditions in the area were favourable during the year notwithstanding the fact that there was a minor outbreak of plague and smallpox. Plague accounted for nine attacks and eight deaths. The epidemic was the continuation of the previous year's and carried through the cold months of January and February in a mild form. Smallpox was responsible for five attacks with no deaths, the outbreak being confined to an isolated village in the Shan plateau near the township border. Energetic anti-plague measures were carried out in the affected villages. A total of 1,140 persons were innoculated against plague; rat holes numbering 2,390 with 5,786 connecting holes were fumigated with cyanogas; trapping was also carried out in the houses of the villagers and thus 3,782 rats were destroyed. Vaccination campaigns were started to check the spread of smallpox. The two vaccinators in the township have definite tour programmes designed in such a way as to cover every village and hamlet almost twice a year. The total vaccinations performed during the year was 6,771 and since

* The birth and death rates are this year calculated on 81,189 the population of Yamèthin township excluding Yamèthin Municipality.

the inception of the health centre 24·39 per cent of the total population have been vaccinated or revaccinated.

As in previous years, the mobile conservancy unit comprising of four coolies and one maistry with a pair of bullocks and a cart continued to carry out village clean up drives as it travelled from village to village under the supervision of the Public Health Inspector. During the year 72 clean up drives were carried out in 24 villages and in the course of the campaign 32 compost pits were installed in the villages for demonstration purposes and 1,142 cart loads of rubbish were carted and burnt outside the villages. The advantages in having bored hole latrines were explained to the villagers and they were induced either to bore the latrines themselves or to contribute according to their individual means towards the cost of boring them. During the year 135 bored hole latrines were installed, the total installed since the inception of the centre being 548. Three village tracts with a total population of 6,107 which are fairly well communicated with Tatkon are allotted to the health visitor and the midwife. Child Welfare Clinics were held at Tatkôn and Nyaungthinhka. A total of 188 clinics were held at both the places with a combined attendance of 1,710 children and 61 mothers. Pre-natal examinations were carried out at the same time as infant consultations. The health visitor made 3,319 home visits to infants, pre-school children and expectant mothers. The midwife of the centre conducted 49 deliveries and paid 787 visits to expectant mothers. Health habits such as the proper use of bored hole latrines, cleaning teeth, use of individual drinking cups and observance of personal hygiene and cleanliness have been diffused in the daily programme of the central school at Tatkon and some feeder schools in the Rural Uplift Centre area. Fourteen schools were visited on 21 occasions and 303 school children from six vernacular schools were physically examined. The most common defects noticed were defective teeth, enlarged tonsils and pyorrhoea. In the course of inspection 47 defective teeth were extracted, minor ailments in 42 children were attended to and 18 children unprotected from smallpox were also vaccinated. A nutrition survey was carried out by the Nutrition Survey Officer in three villages in the township. During the year, 130 ordinary lectures, 17 lantern demonstrations and 12 cinema shows were given to audiences estimated at 12,967. These health shows were supplemented by distribution of 14,230 health publications on various subjects.

The health centre also participated in the opening of the Rural Reconstruction School at Meiktila in October 1939 under the auspices of the Meiktila Rural Reconstruction Society.

The fact that malaria is an outstanding public health problem in the centre area is borne out by the Report of the Malariologist who

surveyed the area in 1939. The report has revealed that *anopheles culicifacies* and *anopheles minimus* are actively concerned in the transmission of malaria in this area and their principal breeding places are the natural water courses of the *chaung* and its feeder streams and irrigation channels. The difficulties in carrying out anti-malarial measures in a sparsely populated and widely scattered area like Yamèthin township are many. It is intended in the first instance to establish practical anti-malarial demonstration centres in a few selected villages from which it is hoped that the ideas of anti-malaria measure will radiate to the surrounding villages. Sanction has been obtained after the close of the year for the entertainment of additional staff for anti-malaria work. During the year 4,520 cinchona tubes were distributed in the area and since the inception of the centre 20,671 tubes of the drug were distributed. Larvivorous fish brought from the Yamèthin hatchery were introduced into three tanks and two miniature hatcheries. The fish were also let off into lowlying irrigated tracts. The result obtained in Nyaungbo-O village where fish have been introduced for two years in succession coupled with the free distribution of cinchona febrifuge tablets has been encouraging, as the severity of malaria was appreciably less during the year. Of the 33 cinchona plants grown as an experimental measure only four plants survived during 1939. The failure of the experiment is probably due to lack of suitable type of soil and climatic conditions in the villages where the plants were planted.

Leprosy surveys were carried out by the Special Leprosy Officer, Burma, in 13 villages around the centre area. The incidence of leprosy in the surveyed villages varies from 0.16 per cent to as large as 3.61 per cent. Scrutinising the histories of cases, it is found that the disease is more or less confined to the relatives or associates or neighbours of lepers, who remain in the villages. The number of inmates in the Nyaunglun Leper Colony which was opened in December 1939 has increased from 14 in 1938 to 54 this year. Sixty treatment clinics were held at the colony during the year with an average attendance of 34 per clinic. A leper clinic was constructed at the Rural Uplift Centre, Tatkon, this year, where the average attendance was 28 per clinic day. In the leper clinic at the Civil Hospital, Yamèthin, the average attendance per clinic was 36. With the establishment of the Nyaunglun Leper Colony and the opening of two clinics at Yamèthin and Tatkon it is hoped that in time to come there will be a marked effect in checking the spread of leprosy in this township.

It has already been pointed out that while the supply of water is sufficient throughout the year in the interior villages, there is a shortage of water supply during the hot months in those villages which lie near the trunk road. Samples of water from seven wells in the

Tatkon area were sent to the Harcourt Butler Institute of Public Health, Rangoon, for chemical analysis and their reports show that with two exceptions, the water in the others was hard. For Tatkon village the scheme of the Sanitary Engineer to provide pipe water from infiltration wells by the side of the Nawin *chaung* seems to be the most feasible one. If it is found too expensive to install pipe lines to the whole station, a couple of hydrants may at least be provided at suitable centres at Tatkon from which the villagers can fetch their water supply. At Inbetkone village three miles from Tatkon a well has been constructed with the materials supplied by the Health Centre, while the villagers contributed the labour and transport necessary for the work.

U Tha Saing, the Health Officer in charge, who is himself keenly interested in rural welfare problems has put his heart and soul into the work.

CHAPTER VI.

Maternity and Child Welfare.

The campaign against maternal and infant mortality falls into three parts, *viz.*, the protection of the mother, the protection of the infant and the protection of the school child. The statistics available on these subjects and the measures taken are described in the ensuing paragraphs.

Maternal Mortality Rate.—The maternal mortality rate is calculated by taking the number of maternal deaths per 1,000 live births. In Burma during 1939 the maternal mortality rate was 4·63 the rates for rural and urban areas being 3·84 and 10·65 respectively. Registering agencies in this country have been instructed to classify all death of mothers within 14 days of delivery as being due to effects of child birth. The low rate in the rural areas leads to suspicion as to whether the headmen are following this instruction carefully. The urban rate may be taken to be approximately correct. The rate for England and Wales in 1937 was 3·26.

Still-Birth Rate.—The number of still-births recorded during the year is 4,723. Of these, 1,603 occurred in the rural areas and 3,120 in towns. The percentage of still-births to live births is 1·10, which is 0·01 lower than that of the previous year. Details of still-births by classes and sex are shown in Statement I (a) in Volume II of this Report. The figures from the rural areas are so low as to be obviously inaccurate. For instance, it is unbelievable that in Prome district where 12,315 births were recorded, not even a single still-birth took place during the year, as noted in the district returns. This question is being looked into and definite instructions will be issued by this Department in due course to get better registration of still-births in rural areas.

Infant Mortality Rate.—The death rate among infants under one year is considered as a useful index to the social circumstances of a country. The rate for the whole of Burma is 203·85. The rate in England and Wales during 1937 is 58. From this it will be seen how much leeway this country has to make up if anything like the rate recorded in England and Wales were to be attained. The reasons usually attributed for the high rate are maternal ignorance and poverty, insanitary surroundings, birth of weakly infants to mothers whose conditions are debilitated by a rapid succession of pregnancies and want of skilled assistance during labour. The causes are multiple and complex and include social and economic factors. The remarks of a Lady Assistant District Health Officer of this Department who was sent to investigate the high infant death rate in a town are reproduced below to show the factors that contribute to the high infant mortality, “From the infants I inspected during my home visits, I have formed a very strong conviction that most of the deaths which occur within the first three months are primarily due to malnutrition. Most mothers, even those of the middle class that can afford luxurious diet, try to starve themselves during pregnancy. This I may say is due to the Burmese custom and prejudices that they still follow even now. They believe that if during this period they live strictly on rice diet with some dried fish and other dried products, they are bound to be free from ailments that people who take plenty of fresh and rich foodstuff would suffer from. In some very poor cases pregnant mothers would restrict themselves to such an extent that they would eat nothing but rice and a few grains of salt as they cannot afford to have dried fish. Is there any wonder then that a child born of such a mother is so poorly nourished? On examination some mothers were found to be devoid of subcutaneous fat, some have angular stomatitis and gastro-intestinal disturbance, etc. The infants are also devoid of subcutaneous fat, their bones are very soft, and on the whole they are very undersize”.

The rate for rural areas is 194·96 and this is 19·35 below last year. High rates have been recorded in Shwebo 306·01, Kyauksè 283·76, Sandoway 257·96 and Yamèthin 248·09. The low birth rate recorded in Sandoway leads to the suspicion, whether its infant mortality rate, which is calculated on the live births recorded in the district is accurate. The other districts return a high fever death rate and it is probable that malaria partly accounts for the high infant mortality.

The rate for towns is 271·29. The figure indicates a decrease of 14·63 compared with the previous year but it is above the five-year mean by 4·58. Excluding cantonments, the towns recording the highest rates are Taungdwingyi 526·43, Thamaing 506·10, Pakôkku 473·42, Myingyan 394·50, Nyaunglebin 392·62, Thingangyun 382·11

and Moulmeingyun 375·91. The accuracy of the rates returned from Thingangyun and Thamaing is open to question, as these towns record a low number of births. The margin of error in the infant mortality rates, calculated on these low figures is likely to be great. Of the two Town Committees Thingangyun does not employ even a midwife. In Taungdwingyi the Infant Welfare Society has employed a health visitor and is running a clinic on approved lines. The two midwives of the municipality perform good work but the general sanitation of the town is very low. Improvement can only be expected after perseverance over a period of years. The incidence of venereal infection among mothers needs investigation. In Pakôkku out of 383 deaths 98 were ascribed to infantile convulsions, 29 to infantile malnutrition and debility and 18 to premature births. The incidence of respiratory diseases is very high in the town and it is likely that a large percentage of infant deaths would have been due to these affections. The persistently high infant mortality rate in Myingyan is not likely to come down unless the sanitary condition of the town is much improved. There is no child welfare society in the place to pay special attention to infant welfare. With the formation of an Infant Welfare Society in Moulmeingyun after the close of the year it is hoped that there will be some improvement in the infant mortality rate in the ensuing year. In Nyaunglebin no strenuous efforts seem to have been made to form an infant welfare society.

Maternity Work.—The provision of an adequate domiciliary midwifery service is the responsibility of local bodies such as municipalities, town committees, district councils and Deputy Commissioners' local funds. A small number of municipalities give contributions to the infant welfare society in their area and permit them to employ and supervise the work of the midwives. In this way 34 midwives were employed by ten societies and they attended 5,540 confinements. The number of midwives in the employment of local bodies was 270 and they attended 29,351 confinements. In the Rural Health Unit, Hlegu, and in the Rural Uplift Centre, Tatkôn, five midwives were employed and they attended 468 confinements. The percentage of births attended by midwives in urban areas is 35·98 and in rural areas 3·86.

Statistics as to the skilled assistance utilized by mothers during delivery time are available in 16 towns. From these it is observed that of the total births in these towns 28·09 per cent were attended by municipal and infant welfare societies' midwives, 6·61 per cent by private midwives, 2·90 per cent by private practitioners, 15·71 per cent in hospitals and the balance of 46·69 per cent by untrained midwives.

Child Welfare Work.—Voluntary societies supervise most of the child welfare work in Burma, the exceptions being the Rural Health Unit, Hlegu, Rural Uplift Centre, Tatkôn, and the Corporation of Rangoon, where Government, or the local body has employed the staff. The activity of most societies is dominated by the enthusiasm displayed by members of their Committees. It is regretted that this necessary enthusiasm is not shown in all cases. The total number of societies was 52. Of these, 32 societies conducted 37 centres, 24 employing 25 health visitors and 8 employing a midwife or nurse to do the same work.

Health visitors in Burma are trained at the Burma Health School held at the Harcourt Butler Institute of Public Health, Rangoon. Ten students were admitted into the class which commenced on the 1st July 1939, seven as stipendiary and three as non-stipendiary. All of them passed the final examination.

All voluntary societies depend upon grants from Government, the Red Cross Society and Municipal and Town Committees and to a certain extent on local subscriptions and donations for their maintenance. A sum of Rs. 20,000 was spent by Government in grants to 26 societies, the amount given in each case varying from Rs. 150 to Rs. 4,100 and the Burma Red Cross Society allotted Rs. 5,900 to 25 societies.

The following is a brief summary of the activities of the principal child welfare societies in Burma :—

RANGOON.—The National Council of Women in Burma received by way of donation during the year the premises in which they were holding the Baby Welcome Child Welfare Centre at Bow Lane. Their sectional committee continued to manage the *Rai Bahadur* R. K. Ghose Child Welfare Centre at Kemmendine as well. The attendances at the two centres were 4,673 and 4,284 respectively and the home visits made by the two health visitors 4,794 and 4,373 respectively. The Corporation of Rangoon is running four Child Welfare Centres with eight health visitors. The Maternity and Infant Welfare Society, Rangoon, has nine midwives in its employ and is maintaining four maternity centres where 1,980 cases were confined. Ante-natal attendances at the centres numbered 7,976 during the year.

MANDALAY.—The staff of the Maternity and Infant Welfare Society consists of eight midwives, one lady superintendent and two health visitors. The midwives attended 1,019 cases. The attendances at the two centres numbered 10,898 and the two health visitors paid 9,420 home visits.

MAYMYO.—The health visitor employed by the Society for the Promotion of Public Health made a total of 3,500 home visits, of

which 978 were to expectant mothers. The attendances at the two centres numbered 3,933.

BASSEIN.—The Infant Welfare Society employs one health visitor and four midwives. The average number of home visits paid by the health visitor was 427 a month. For the convenience of the public on the other side of the river a second centre was opened in February. The average attendances at the old centre was 526 a month, and at the new centre 49. The midwives attended 600 confinements.

MOULMEIN.—The Society for the Prevention of Infantile Mortality had 3,178 attendances at its two centres and the health visitor paid 3,384 home visits. The four midwives of the society attended 827 confinements.

HSIPAW.—The Maternity Home Society shifted its Child Welfare Centre from a hired building near the bazaar to a room in the main building in the Civil Hospital. The attendances at the centre totalled 1,612 and the health visitor paid 5,005 home visits.

TAUNGGYI.—The attendances at the centre run by the Infant Welfare Society, Taunggyi, were 1,175 ; the home visits made by the health visitor 4,482.

MÔNYWA.—The health visitor attends to an average of nine cases a day at the clinic and also pays home visits.

CHAUK.—The attendances at the clinics numbered 1,907 and the home visits paid by the health visitor 3,730.

TOUNGGOO.—The attendances at the clinics totalled 1,639, and home visits 5,416.

TAUNGDWINGYI.—The Maternity and Infant Welfare Society is making strenuous efforts to have a building of its own for doing welfare work. The health visitor paid 4,004 visits to homes and the attendances at the centre numbered 1,790. It would be a good idea if some of the prominent ladies in the town are brought on the committee and the co-operation of the Local Government Medical Officer enlisted by inviting him also to the committee.

PROME.—The health visitor of the Infant Welfare Society paid 5,667 home visits and the attendances at the centre numbered 3,042.

HENZADA.—The attendances at the centre maintained by the Infant Welfare Society totalled 3,414. The health visitor paid 2,325 home visits.

THATÔN.—At the centre maintained by the Infant Welfare Society the attendances numbered 3,167 ; the health visitor has made 2,047 home visits

MEIKTILA.—The Infant Welfare Society shifted its centre to its new building in August. The attendances at the centre numbered 1,910 and home visits 3,824. Both these figures show improvement over the previous year.

YAMÈTHIN. —The attendances at the centre maintained by the Child Welfare Society and the home visits made by the health visitor were on the increase, the figures this year being 2,669 and 4,329 respectively.

PYINMANA.—In this place the centre attendances totalled 4,008 and home visits 8,556.

BHAMO.—There was an improvement both in the centre attendances and in the home visits made by the health visitor. The former totalled 1,074 and the latter 2,889.

SHWEBO.—Due to want of local interest, the activities of the Infant Welfare Society, Shwebo, were suspended from 20th July 1939. During the six months of her employment the health visitor paid 1,715 visits to homes of children and expectant mothers, the attendances at the centre during the same period being 471.

YENANGYAUNG.—A trained health visitor was in the employ of the Infant Welfare Society till the end of December after which a nurse was appointed to carry on her work. The average attendances at the clinic was 218 per month while the average number of home visits was 550 per month.

SYRIAM.—The Child Welfare Society employed in November an additional nurse who had undergone training as health visitor, to conduct its two welfare centres. The nurse visited 3,041 homes and the attendances at the two centres totalled 3,872.

MINBU.—The Infant Welfare Society replaced the nurse who was doing child welfare work by a trained health visitor from the beginning of November. The home visits numbered 5,932 and the visits to the centre 1,127.

PEGU.—A trained health visitor was employed in the place of the nurse midwife by the Infant Welfare Society, Pegu, from October 1939. The centre attendances during the year numbered 1,736 and home visits 3,988.

The child welfare work done in the Rural Health Unit, Hlegu, and the Rural Uplift Centre, Tatkôn, are described in another part this Report.

The societies at Akyab, Tharrawaddy, Magwe, Kyauksè, Sagaing, Pyapôn, Thayetmyo and Mergui employed a midwife or nurse to conduct their child welfare centres. A certain amount of child welfare work is reported to have been done by six other societies from which annual reports have been received.

Medical Inspection of School Children.—Medical Inspection of school children is now done on a purely voluntary basis. Some of the school authorities levy a fee on the pupils and have the examination done by a qualified doctor. In one or two instances medical men have done the work gratis. The number of inspection reports received was 26. Of these, 7 were from day schools and 19 from boarding schools. Eight of the boarding schools were English and the others Anglo-Vernacular schools.

The number of pupils on the rolls of these schools was 8,116, of whom 7,699 or 94·86 per cent were medically examined. Of the children examined, 42·84 per cent were protected by primary vaccination, 55·32 per cent by revaccination, while 1·31 per cent were protected by an attack of smallpox. The unprotected constituted 0·53 per cent.

The commonest defects noted are defective teeth 21·30 per cent, enlarged tonsils 11·84 per cent, defective vision 4·81 per cent, glandular enlargement 3·92 per cent and skin diseases 3·52 per cent. There has been much variation in the incidence of defective teeth not only from place to place but also from one school to another in the same place. Taking three schools which have more or less the same strength, it is noticed that in the Baptist English High School, Rangoon, out of 440 boys examined 206 or 46·82 per cent have been registered as having defective teeth, while in the Government High School, Akyab, out of 455 pupils examined only 23 or 5·05 per cent are registered for defective teeth and in the Methodist Burmese Girls' High School, Rangoon, out of 423 girls examined only 5 or 1·18 per cent are recorded as having defective teeth. In the absence of a supervising authority to guide the School Medical Officers in applying a uniform standard in the classification of complaints this extraordinary variation in the incidence of diseases is bound to occur.

One good the Medical Officers do is to protect the pupils by preventive inoculation during outbreaks of epidemic diseases. Thus the Medical Officers, St. Mary's English High School, Mandalay, and Huldah Mix Girls' High School, Taunggyi, gave T.A.B. and plague inoculations to the pupils as a prophylactic measure, while the Medical

Officers, Wesley Boys' High School, Mandalay, and St. John's European Middle School, Toungoo, gave the boarders in the school inoculation against typhoid.

In the Cushing High School, Rangoon, in addition to the Medical Officer a dentist also examined the pupils. The Inspector of Schools, Rangoon Circle II, rightly remarks on this report, "The number of defects cured is a pleasing feature of the report and the obvious co-operation of parents speaks well for the relations between them and the school". The response of the parents in carrying out of the recommendations of the school Medical Officers has been reported to be fairly good in the case of St. John's European Middle School, Toungoo, Baptist English High School, Rangoon, and the Bombay Burma Anglo-Vernacular School, Rangoon, while in the case of the parents in the Government High School, Akyab, Government High School, Moulmein, Judson Boys' High School, Moulmein, and the State Anglo-Vernacular School, Momeik, the response was either nil or unsatisfactory.

District Health Officers, Assistant District Health Officers and Sub-Assistant Surgeons of the Public Health Department continued to carry out inspection work of vernacular schools during the course of their tour in rural areas.

CHAPTER VII.

Public Health Propaganda.

Hygiene Publicity.—In rural areas the public health staff gave 467 (349) health talks, 11,903 (12,128) lectures, 365 (426) magic lantern shows, 18 (23) cinema demonstrations to audiences estimated at 693,929 (710,309). They also distributed 181,156 (255,309) copies of health publications on various subjects. The urban health staff gave 489 (264) health talks, 1,216 (981) lectures, 234 (235) magic lantern shows, to audiences estimated at 135,666 (132,817). They distributed 128,478 (152,849) health publications. The Hygiene Publicity Officer carried out health propaganda work in 26 (14) towns and 30 (23) villages. The towns included such important centres as Akyab, Myingyan, Pegu, Meiktila, Thatôn Prome, Katha, Bhamo, Toungoo, Magwe and Pakôkku. The villages of Ywathit and Popa were visited at the request of U Ahlawka, Principal of Normal and Vernacular High School, Taungtha; Shanmange and Kyauktan villages at the request of U Tun Hla Oung, District Superintendent of Police, Chairman of the Rural Reconstruction League, Meiktila; Kyauktaw and Myohaung villages at the request of the President of the District Council and Municipality, Akyab, and Gamu, Kywegaungin and Natyegwin villages at the instance of Dr. J. R. Andrus of Rural Uplift Society, Judson College. The vacation school of Rural Reconstruction opened by His Excellency the Governor

of Burma at Meiktila was attended by five officers of this Department, *viz.*, U Maung Gale, B.A., M.B., D.P.H., Nutrition Survey Officer, Burma ; U Tha Din, L.M. & S., Special Leprosy Officer, Burma ; U Tin, D.T.M., Malariologist, Burma ; Daw Ngwe Nyun, M.B., B.S., Officiating Assistant District Health Officer, and U Thaw Zan, Hygiene Publicity Officer, Burma. Lectures, lantern and cinema shows and health exhibitions were given by them at the School. One momentous event of the year is the success of the riverine trip from Mandalay to Prome, arranged by U Kyin, M.Sc., I.C.S., Registrar, Co-operative Societies, Burma, at the instance of U Ba Lwin, President, Rural Reconstruction League, Burma. Three officers of this Department, *viz.*, U Maung Gale, U Tin and U Thaw Zan joined the trip, giving lectures, cinema shows and health exhibitions at such important stations as Myinmu town, Ngazu village, Phakangyi village, Nyaung-U, Sinbyugyun, Magwe, Minbu and Thayetmyo. The Hygiene Publicity Officer co-operated closely with the Police Anti-Crime Bureau through the courtesy of Mr. H. R. Alexander, Deputy Inspector-General of Police, Southern Range. Health Exhibitions on a small scale were organized by the Hygiene Publicity Officer, with the help of portable health exhibits so very kindly loaned by the Burma Red Cross Society, at Akyab, Kyauktaw, Pegu and Meiktila. These shows all proved very successful and are believed to be highly instructive. In all U Thaw Zan gave 29 (37) lectures, 100 (75) cinema demonstrations, 101 (76) lantern lectures to audiences estimated at 181,700 (126,433) and distributed 77,350 (62,400) copies of health publications. Lectures on plague and leprosy were broadcast by U Thaw Zan and U Tha Din from the Rangoon Broadcasting Station.

A total of 482,181 (522,579) copies of health publications were issued by the Hygiene Publicity Bureau. Six new pamphlets were produced each one both in English and Burmese during the year under report. They deal with maternity and child welfare work in Burma ; Roofing of village houses and huts with palm leaves ; Instructions to headmen in respect of the prevention of smallpox ; Instructions to headmen in respect of cholera ; Instructions to headmen in respect of the prevention of plague ; and the Nutritive value of rice. Six pamphlets were revised, twenty-seven reprinted and four rendered into Kachin language. One 16 m.m. cinema film entitled " Lamps of Life " on the subject of blindness, a present of the Burma Red Cross Society, was added to the library of films of the bureau.

Burma Red Cross Society and Health Propaganda.—Arrangements were in hand to hold the Rangoon Health Week, when war broke out in September 1939. Owing to uncertainty for the future it was decided by the Burma Red Cross Society to abandon the Health

Exhibition in 1939. In order not to cause disappointment to schools and pupils, the essay and poster competitions, which had been advertised, were conducted by the Society and the results were encouraging. Essays numbering 883 were received from 373 schools and 44 prizes were given. The subjects of the essays were "Village Sanitation" and "Infant Welfare". In the poster competition 118 posters on health subjects were received from 33 schools. They were of a high standard and indicate growing interest in health education.

The portable health exhibits of the Burma Red Cross Society, which are popular and instructive, were sent to the following places during the year:—Pyinmana, Yamèthin, Akyab, and its riverine stations, Pegu, Tatkon, Meiktila, Mandalay and Prome.

CHAPTER VIII.

Personnel employed on Public Health Work in Burma.

DISTRICT STAFF.

District Health Officers.—Whole-time District Health Officers were continued to be employed in Akyab, Myaungmya, Pyapôn, Insein and Hanthawaddy districts, the appointments being permanent in the first three districts and temporary in the other two. There were no changes in personnel since the last year's report, except that Saw Kya Zit, M.B., D.P.H., District Health Officer, Pyapôn, went on two months leave from the forenoon of the 16th May, during which period the Civil Surgeon, Pyapôn, performed the duties of the District Health Officer in addition to his own duties.

Assistant District Health Officers.—The sanctioned strength of Assistant District Health Officers is five. Two of the incumbents were officiating as District Health Officers and two others were sent on foreign service during the year as Health Officers of Mandalay and Bassein Municipalities. The fifth officer officiated for some time as the Health Officer, Maymyo Municipality, and was then transferred as Assistant Port Health Officer, Rangoon. In their places U Ba Nyun, B.Sc., M.M.F., D.P.H., officiated for a few months as Assistant District Health Officer in Meiktila district and then was seconded as the Health Officer, Maymyo Municipality. Mr. R. P. Edwards, M.B., B.S., and Daw Ngwe Nyun, M.B., B.S., officiated in two of the other vacancies, the former being employed during the year in Shwebo and Bhamo districts and as the Health Officer, Maymyo Municipality, and the latter on health propaganda work and inspection of Infant Welfare Societies during the year. U Than Aung, M.B., B.S., who officiated as an Assistant District Health Officer in one of the vacancies resigned his appointment from the 3rd April on

obtaining a State Scholarship to study tuberculosis and Saw Be Graf, M.B., B.S., was recruited in his place. The latter was employed in Pyapôn and Bassein districts. At the end of the year there were two officiating vacancies in this cadre which required to be filled up.

Sub-Assistant Surgeons.—The sanctioned strength of this cadre is 36. They constitute the principal mobile staff which can be massed on any area threatened or infected with an outbreak of epidemic disease. They perform the bulk of preventive inoculation in the rural areas. Between epidemics, they conduct health propaganda, check vital statistics and vaccination work, inspect vernacular schools and give advice to the village headmen for improving the sanitary condition of their areas. During the year these Sub-Assistant Surgeons performed 147,274 anti-plague and anti-cholera inoculations, checked 99,008 birth and death entries and verified 44,107 vaccinations.

Public Health Inspectors.—Seventy-nine Public Health Inspectors were employed in the rural areas of Burma. The inadequacy of this personnel has often been commented upon. The Public Health Inspectors Training Class was opened early in August 1939 with 23 candidates, of whom 19 passed the final examination, two gaining distinction.

Twenty Inspectors of Vaccination and 317 vaccinators were employed in the rural areas.

URBAN STAFF.

Eight towns employed 15 first class Health Officers and eight towns employed eight second class Health Officers. Mr. C. C. Po., M.A., L.M.S.S.A., D.P.H., R.C.P.S., was appointed as the Health Officer of the Suburban Town Committees of Kanbe, Thingangyun, Thamaing and Kamayut with effect from the 16th March 1939. His appointment is in the Government establishment. Twenty-one Medical Registrars, 136 Public Health Inspectors and 93 vaccinators were in addition employed in urban areas.

EXPENDITURE ON PUBLIC HEALTH SERVICES.

The total amount spent during the year by local authorities on public health services was Rs. 1,05,40,299 of which Rs. 96,98,505 were spent in towns and Rs. 8,41,794 in rural areas. The percentage of income expended by all local bodies on these services was 19·28 per cent, the figure for towns being 24·15 per cent and for districts 5·81 per cent. Of the total income from all sources 9·88 per cent was spent on construction and maintenance of water works, 0·60 per cent on drainage and 4·68 per cent on conservancy. Compared with the previous year

it is noticed that the expenditure on water supply has more than doubled. This is mainly due to the inclusion of a sum of Rs. 43,89,023 spent by the Rangoon Corporation on the Gyobyu Water Works. The details of expenditure are given in Statement A attached to this Report.

NUTRITION WORK.

Nutrition work in Burma during 1939 may be considered under two main heads, *viz.*, Investigation and Education.

Investigation is generally made in the form of (i) diet surveys to judge the adequacy or otherwise of the foods consumed, (ii) examination of school children to assess their state of nutrition, (iii) experimental feeding to see how far the administration of foods of high nutritional value affect the growth and health of different classes of people and (iv) chemical analyses of food-stuffs to determine their composition. During 1939, diet surveys were carried out in different parts of Insein, Bassein, Yamèthin and Minbu districts. The reports on the surveys in Insein and Bassein districts are under print and the data obtained in Yamèthin and Minbu districts are being worked up. The chief deficiencies noted in the diet were in animal protein among the poorer classes, and in calcium and Vitamins A and B, in all classes, irrespective of the economic status of the bread winners in the families. Simultaneously with diet surveys, school children or village children of both sexes from 4 to 12 years of age were examined with a view to assess their state of nutrition. Heights and weights were taken and clinical signs of deficiency diseases were looked into. As a result of these investigations it may be possible to work out height and weight averages for school children in Burma. In the surveyed area the incidence of Bitot's spot and Phrynoderma was found to be less but angular stomatitis and sore tongue more common than in South India. The percentage of children considered to be definitely malnourished ranged from 6 to 24. Partly due to insufficiency of funds and partly due to the limited availability of the vitamin concentrates required, no feeding experiments could be carried out. A number of foodstuffs peculiar to Burma have been chemically analysed at the Harcourt Butler Institute of Public Health, Rangoon. *Seinsangapi* and dried sprats were noted to have a high calcium content and a vegetable fruit known as "gyinkhaboung-thee" was found to be very rich in Vitamin C. Though inadequacies in diet are generally the result of lack of means to purchase the right kind of food, ignorance on the part of the people also plays a considerable part. It is surprisingly common to find relatively well to-do sections of the population living on diets of poor quality when for an expenditure within their means they could by the wise choice of foodstuffs obtain all the constituents of a good diet in sufficient quantities. With the object of inculcating a better and more widespread knowledge of the

principles and practice of rational nutrition among the public, two leaflets "Do you get a square meal" and the "Nutritive value of rice" were prepared with in English and Burmese and issued among the Burma Public Health Series. A short article entitled "A healthy diet" has been published in English in "The Pharmacy" and in Burmese in "The Life Guard". A longer article on the same subject has been published in the "Shwe-pyi-daw". The Nutrition Survey Officer assisted in the preparation of material for the Nutrition Section of the Medical College Science Exhibition. He accompanied U Kyin, I.C.S., of the Co-operative Department on his riverine tour for propaganda purposes and delivered lectures on dietetics in the places visited. During the course of diet surveys in villages, short talks on dietetics were given to selected families. In villages this was found to be of more value than public meetings. Popular lectures on districts were given to Rural Reconstruction workers on the occasion of their annual gathering convened by the Rev. B. C. Case at Pyinmana and also to the students of the Rural Reconstruction Vacation School at Meiktila. A course of four lectures on dietetics was given to ten Sub-Assistant Surgeons of the Civil Medical Department undergoing the post graduate course. A course of lectures on dietetics was given to the Sub-Assistant Surgeons of the Public Health Department undergoing the course of Licentiate in Hygiene and courses on the same subject were given to the students undergoing training in the Public Health Inspector and Lady Health Visitor Classes.

Headquarters Staff.

The activities of the Harcourt Butler Institute of Public Health, Rangoon, are the subject of a separate report, while the Annual Report of the Port Health Department is published as Appendix D to this Report.

Major C. A. Bozman, M.B., Ch.B., D.P.H., I.M.S., proceeded on leave from the afternoon of the 20th April 1939 and Major T. J. Davidson, M.B., Ch.B., D.T.M. & H., D.P.H., I.M.S., was appointed as Director of Public Health, Burma, in his place. U San Hla Aung, M.B., Ch.B., D.P.H., and Mr. K. T. Jungalwalla, L.M. & S., D.P.H. held charge of the post of two Assistant Directors.

T. J. DAVIDSON, *Major, I.M.S.,*
Director of Public Health, Burma.

RANGOON : 27th July 1940.

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APPENDIX A.

VACCINATION.

(THIS REPORT REFERS TO THE OFFICIAL YEAR 1939-40.)

(The figures in brackets are the corresponding figures for 1938-39.)

Establishment.—The following table shows the strength of the vaccination staff employed in Burma and the Federated Shan States during the year 1939-40 as compared with that of the two preceding years :—

VACCINATION STAFF.

Year.	Burma or State.	Part-time Supervising Officers.		Wholetime Staff.		
		Civil Sub-Assistant Surgeons.	Public Health Inspectors.	Inspectors of Vaccination.	Head Vaccinators.	Vaccinators.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1937-38	Burma ...	14	117	19	...	355
	Shan States	...	2	...	3	42
1938-39	Burma ...	8	146	18	...	355
	Shan States	...	5	...	3	45
1939-40	Burma ...	6	155	17	...	361
	Shan States	...	5	...	3	50

Burma.—During the year 1939-40, six more vaccinators were employed, compared with the previous year. Increase of staff is reported from the districts of Toungoo 1, Bhamo 2, and Myitkyina 5, while a reduction occurred in Mergui 1 and Mandalay 1 districts. The staff in the urban areas remained the same. Nine more public health inspectors verified vaccinations in Burma. The number of civil sub-assistant surgeons in receipt of verification allowance was reduced from 8 to 6. As usual, the epidemic sub-assistant surgeons, assistant district health officers, municipal health officers and civil sub-assistant surgeons who have been appointed superintendents of vaccination in urban areas also verified vaccination.

Nine (8) temporary vaccinators for short periods were employed during the year, 6 to cope with smallpox outbreaks and 3 in place of Pakôkku District Council vaccinators deputed for work in the Pakôkku Deputy Commissioner's Local Fund areas.

Federated Shan States.—Five extra vaccinators were employed here. Otherwise, the staff remained the same.

VACCINATIONS PERFORMED.

Burma.—A total of 1,579,549 (1,311,742) persons was vaccinated during the year. Of these 964,926 (949,320) were vaccinated by regular vaccinators in rural areas, 414,134 (198,280) by regular vaccinators in urban areas, 3,950 (1,947) by military authorities in cantonment areas, 5,985 (1,143) by railway dispensary staff, 1,225 (2,572) by Government dispensary staff, 10,251 (1,278) by private medical practitioners, 38,665 (45,383) in jails and 140,413 (111,781) in ports.

Rural Vaccination.—Of the 965,150 (949,797) operations performed in rural areas by regular vaccinators, 505,107 (505,742) were primary and 460,043 (444,055) revaccinations.

Of the primary operations, 468,333 (475,304) were successful, while the results of 32,882 (27,031) were left unverified. The percentage of success in verified cases was 99·18 (99·29) per cent.

Of the successful primary operations, 155,831 (151,241) were on infants under one year of age, 248,297 (255,976) on children of one to six years and 64,205 (68,087) over six years. The need to have infants vaccinated in their first year of life is being continuously pointed out to the Superintendents of vaccination.

Of the 460,043 (444,055) revaccinations, 114,225 (119,951) were successful, while the results of 81,919 (65,071) are reported as “unknown”. The percentage of success in known cases was 30·21 (31·65) per cent.

The number of persons known to have been successfully vaccinated and revaccinated per thousand of population was 49·91 (51·00). High success rates in revaccination are reported from the districts of Upper Chindwin, Tavoy, Chin Hills, Lower Chindwin and Myitkyina. The need for pushing revaccination work is indicated and is being constantly brought to the notice of the superintendents concerned.

Urban Vaccination.—In the urban areas, excluding cantonments, 414,154 (198,294) operations were performed by regular vaccinators. Of these 53,810 (46,822) were primary and 360,344 (151,472) were revaccinations. Of the primary 52,384 (45,395) were successful, while the results of 1,165 (1,054) remained unverified. The success rate in verified cases was therefore 99·50 (99·19) per cent. Fifty-four (44) towns reported 100 per cent successes, while the rest, *viz.*, 20 (30) towns reported successes between 90 and 100 per cent. Of the 52,384 (45,395) successful vaccinations 40,321 (35,045) were on infants under one year of age and 10,372 (8,884) on children of one to six years. The number of births recorded in urban areas, including cantonment, was 52,605 (48,539) and deaths under one year totalled 13,911 (13,705). The number of survivors according to these records was therefore

38,694 (34,834). The 41,310 (35,541) infants under one year successfully vaccinated including urban cantonments shows an excess of 2,616 (707).

Of the 360,344 (151,472) revaccinations, 69,148 (34,189) were successful while the results of 83,085 (20,249) were not inspected. The percentage of success in verified cases was 24·94 (26·05) per cent. High success rates are reported from Pyu, Bhamo, Kyonpyaw, Minhla, Kyaukpyu, Myaungmya, Pegu, Minbu, Zigôn, Prome, Moulmein, Shwebo and Mônywa. Systematic revaccination campaigns ward by ward should be carried out in these towns. Rates below 10 per cent are reported from Thônzè, Syriam, Myanaung, Wakema, Maubin, Yandoon, Kawkareik, Shwegyin, Allanmyo, Magwe, Pakôkku, Myitnge and Myingyan.

The number of persons successfully vaccinated per thousand of population in towns was 86·37 (56·56).

Military Cantonments.—In the four cantonments of Rangoon, Mingaladon, Mandalay and Maymyo, 3,950 (1,947) operations were carried out, *viz.*, 723 (569) primary and 3,227 (1,378) revaccinations. Of the 671 (565) primary verified cases 651 (560) or 97·02 (99·12) per cent were successful. Of the 2,201 (1,206) verified revaccinations, 1,584 (833) or 71·97 (67·07) per cent were successful. This rate is very high.

Railway Dispensary Staff.—These performed 5,985 (1,143) operations, of which 1,191 (335) were primary and 4,794 (808) revaccinations. Of the primary, 1,154 (328) were successful, 33 (4) being unverified. The success rate in verified cases was therefore 99·65 (99·09) per cent. Of the revaccinations, 939 (320) were successful, 676 (42) being unverified. The success rate in verified cases was 22·80 (41·78) per cent.

Government Dispensary Staff.—These performed 1,225 (2,572) operations, of which 248 (1,868) were primary and 977 (704) revaccinations. Of the primary 64 (364) were successful, 184 (1,503) being unverified. The success rate in verified cases was therefore 100·00 (99·73) per cent. Of the revaccinations, 25 (110) were successful, 799 (288) being unverified. The success rate in verified cases was 14·04 (26·44) per cent.

Private Medical Practitioners.—They carried out a total of 10,251 (1,278) operations. Of the 260 (160) primary operations, 226 (143) were successful and of the 9,991 (1,118) revaccinations, 1,018 (137) were successful—the number of unverified cases being 33 (14) in primary and 7,145 (764) in revaccinations. The success rates in verified cases were 99·56 (97·95) per cent in primary and 35·77 (38·70) per cent in revaccinations.

Jails.—Of the 38,665 (45,383) operations performed in the jails in Burma, 1,066 (626) were primary and 37,599 (44,757) revaccinations. Of the primary cases 86·21 (89·78) per cent were successful and of the revaccinations 44·85 (44·67) per cent were successful.

Ports.—A total of 140,413 (111,819) operations was performed in the ports of Rangoon, Akyab and Mergui on immigrants by sea, of which 2,745 (1,864) were primary and 137,668 (109,917) revaccinations.

Federated Shan States.—A total of 72,815 (65,698) primary operations and 41,090 (46,188) revaccinations were performed by regular vaccinators in the rural areas of the Federated Shan States. Of the verified primary cases 98·69 (98·94) per cent were successful; of the verified revaccinations 54·57 (50·98) per cent were successful. The high revaccination success rate suggests low protection of the people against smallpox. Systematic and intensive revaccination work is needed.

In the three towns of Lashio, Taunggyi and Kalaw, 931 (1,545) primary and 4,878 (14,290) revaccinations were performed. The success rate in primary cases was 99·89 (99·93) per cent and in revaccinations 50·35 (43·01) per cent. Revaccination requires a push in Lashio, which reports high success rate.

The number of operations performed by other agencies in rural areas was 1,348 (1,741) primary and 3,704 (1,912) revaccinations.

VERIFICATION WORK OF INSPECTING OFFICERS.

Burma.—The district and assistant district health officers verified 7·64 (7·06) per cent of the primary vaccinations and 4·28 (5·61) per cent of the revaccinations performed by the regular vaccination staff in the rural areas. In four districts, no cases were verified by district health officers. In urban areas municipal superintendents of vaccination (health officers) verified 27·86 (30·23) per cent of the primary vaccinations and 8·54 15·13 per cent of the revaccinations performed by the regular vaccination staff. In twenty towns, no cases are reported as having been verified by the superintendents of vaccination. The matter is being investigated.

In rural areas, inspectors of vaccination, public health inspectors and public health sub-assistant surgeons inspected 65·54 (67·02) per cent of the primary vaccinations and 51·16 (57·08) per cent of the revaccinations. In urban areas, public health inspectors verified 68·50 (68·23) per cent of the primary vaccinations and 57·61 (63·01) per cent of the revaccinations.

Federated Shan States.—The public health inspectors and head vaccinators verified 43·72 (41·95) per cent of the primary vaccinations and 33·86 (38·80) per cent of the revaccinations in the rural areas.

VACCINE DEPÔT, MEIKTILA.

A total of 21,726 (18,861) grammes of lymph, equalling 2,105,456 (1,864,384) doses, was manufactured during the year. A total of 19,556 (15,955) grammes, or 1,895,163 (1,577,130) doses of lymph was issued. All lymph, before issue, were subjected to microscopic, biochemical and animal tests for pathogenic bacteria and Calmette-Guerin's international potency tests on rabbits. Only lymph which had given 100 per cent success without undue inflammation were issued. The success rate, reported to the Depôt, in primary cases, was 98·10 (98·70) per cent and in revaccination cases was 31·29 (37·30) per cent.

In all 20 (16) cow-calves and 50 (38) buffalo-calves were vaccinated. The average yield per cow-calf was 77·30 (79·56) grammes and per buffalo-calf was 403·60 (462·84) grammes. The Malayan method of animal vaccination was used throughout the year, but instead of the vaccinated buffaloes having been scraped on the 5th day after vaccination as in previous years, they were scraped on the fourth day. Less lymph was obtained as a result, but it was more potent, contained less extraneous organisms and cellular debris, and had greater keeping quality.

The maintenance expenditure of the Depôt was Rs. 29,289-3-3 (Rs. 32,247-1-3) and the total net income was Rs. 46,291-11-0 (Rs. 54,624-9-0) including Rs. 4,983-15-0 balance of the sale proceeds of vaccine lymph outstanding on the 31st March 1939 recovered during the year, but excluding Rs. 14,975-12-0 balance of this year's sale proceeds of vaccine lymph outstanding on the 31st March 1940. The excess of income over expenditure is therefore, after adjustment, Rs. 26,994-4-9 (Rs. 19,972-9-9). This does not include the value amounting to Rs. 2,495-5-0 (Rs. 2,173-3-0) of vaccine lymph supplied free to Government institutions.

No students were trained during the year.

COST OF THE VACCINATION DEPARTMENT.

Burma.—The total cost of the Department was Rs. 4,55,860-8-0 (Rs. 4,44,271-10-8). The average cost of each successful case was Re. 0-10-4 (Re. 0-10-6). If, however, the sum of Rs. 41,921-3-0 realized from the sale of vaccine lymph in Burma be deducted from the total expenditure of Rs. 4,55,860-8-0, the net cost of the Department will be reduced to Rs. 4,13,939-5-0. The average cost of each successful case will then be Re. 0-9-5 (Re. 0-9-4).

High rates of average cost are reported from the following places :—

Districts.—Arakan Hill Tracts Rs. 2-9-5, Salween Rs. 1-1-10 and Mandalay Rs. 1-0-6.

Towns.—Nattalin Rs. 5-4-5, Maymyo Rs. 3-8-3, Kyaukpyu Rs. 3-8-1, Kawkareik Rs. 3-2-10, Magwe Rs. 3-2-7, Minbya Rs. 3-2-2, Nyaung-U Rs. 3-1-1, Danubyu Rs. 2-15-10, Myanaung 2-11-10, Kyônpyaw Rs. 2-8-3, Ye-U Rs. 2-8-1, Letpadan Rs. 2-7-10, Sandoway Rs. 2-6-11, Minbu Rs. 2-6-0, Moulmeingyun Rs. 2-4-3, Pyapôn Rs. 2-4-0, Gyobingauk Rs. 2-3-7, Mawlaik Rs. 2-3-2, Kyaikto Rs. 2-2-11, Salin Rs. 2-2-6, Pyawbwe Rs. 2-1-3 and Pakôkku Rs. 2-1-2.

Federated Shan States.—The total cost of the Department in the rural areas was Rs. 34,062-10-3 (Rs. 31,770-12-4) and the average cost was Re. 0-6-2 (Re. 0-6-10). The cost in the three notified towns was Rs. 1,671-14-0 (Rs. 1,281-9-6), the average cost being Re. 0-8-6 (Re. 0-3-8).

GENERAL REMARKS.

The year's work shows an improvement over that of the previous year. An increase in revaccination work was recorded owing to special measure taken. Compulsory revaccination has been introduced into 26 district council areas and 69 municipal and notified towns up to end of the year under report. Twenty-seven village headmen were rewarded for assisting the Department. One *sesaya* was fined Rs. 50-0-0 for illegal smallpox inoculation under the Burma Prohibition of Inoculation Act. A total of 1,625 persons were prosecuted for failure to submit to vaccination. The majority of the children concerned were vaccinated by the orders of the courts. Some parents were fined and a few cases were pending in court.

APPENDIX B.

PROGRESS REPORT REGARDING SANITARY WORK CARRIED OUT UNDER THE CONTROL OF THE SUPERINTENDING ENGINEER, RANGOON CIRCLE, DURING THE YEAR 1939.

I.—WATER SUPPLY AND SANITATION.

Seven estimates aggregating Rs. 40,233 have been prepared for water supply and sanitation to Government and Local Bodies, *viz* :—

- (1) Pyawbwe Military Police Lines.
- (2) Agricultural College, Mandalay.
- (3) Tavoy Hospital.
- (4) Assistant Superintendent's Quarters, Yenangyaung.
- (5) Thayetmyo Central Jail.
- (6) Thayetmyo Borstal Institute.
- (7) Tharrawaddy Town.

Two estimates amounting to Rs. 74,194 for raising the bund of impounding reservoir to augment storage capacity of water and for boosting water in main for increasing the supply of water at Akyab were examined, amended and returned.

Two preliminary estimates amounting to Rs. 12,500 for water supply to Port of Bassein and Commissioner's quarters, Moulmein, forwarded.

Comparative cost of river water supply and tube well water supply to Prome and approximate cost of river water supply of Magwe Town worked out.

Advice given on the improvements to water supply scheme at Mandalay, Taunggyi, Myingyan, Salin, Nyaunglebin and Kamayut and also to Warden's quarters at Yenangyaung, Police Lines, Thayetmyo, Agricultural College, Mandalay, Military Police Lines, Mandalay, Anglo-Vernacular Town Middle School, Moulmeingyun, and Civil Surgeon's quarters at Taungdwingyi.

II.—BAZAAR.

Seven estimates aggregating Rs. 55,450 for bazaar buildings at Thônzè, Zigôn, Swa, Moulmein, Kamayut, Dedaye and Toungoo have been scrutinized, amended and reported. Approximate cost amounting to Rs. 20,000 for a bazaar at Nyaunglebin has been furnished.

Layout plans for Mônywa and Tharrawaddy bazaars were prepared and furnished.

III.—DRAINAGE AND CONSERVANCY.

Detail plans and estimate amounting to Rs. 54,000 for construction of pucca drains in Nyaungwaing and Panhlaing quarters of Pegu Town were prepared and forwarded.

Two approximate estimates aggregating Rs. 12,700 for flushing the drains at Toungoo and Paungde have been furnished and a scheme for pucca drains in Zigôn Ward, Insein, was examined.

Preliminary estimates amounting to Rs. 13,500 and Rs. 12,500 for night soil conservancy and disposal works at Bogale and Dedaye Town respectively were prepared and forwarded. Improvements to septic tank latrines at St. Agnes Convent, Kalaw and Kambe were scrutinized and returned.

Preliminary survey estimate for Insein night soil disposal works prepared and forwarded for funding.

IV.—RENEWAL FUND.

Advice offered on the Renewal Fund for pucca latrines at Yamèthin, and water works at Nattalin and Minbu water works.

V.—INSPECTIONS.

The following towns were inspected and advice given on water works, drainage, bazaar, layout, etc., at Pyawbwe, Akyab, Mandalay, Myingyan, Toungoo, Yamèthin, Pyinmana, Pegu, Maymyo, Minhla,

Thôngwa, Tatkôn, Myitkyina, Pyapôn, Bogale, Dedayè, Letpadan, and Tharrawaddy.

VI.—TYPE PLANS.

Type plans of bazaars, buildings, slaughter houses, septic tank and latrines were supplied to the Local Bodies on requisition.

VII.—THE BURMA UNDERGROUND WATER ACT.

During the year under report 36 temporary licences for new tube wells and 30 permanent licences (new 28 and 2 old wells) have been issued. Five temporary licences and six permanent licences have been cancelled during the year. Thirty-two temporary licences remained in force as progress has not advanced sufficiently far enough to permit of the issue of permanent licence. The total number of permanent licences on the Register relating to tube wells still in use at the end of the year is 426.

Necessary surveys in connection with the tube well works were also carried out.

APPENDIX C.

SANITARY CONDITION IN MINES.

A.—Thaton District.

The District Health Officer, Thatôn, inspected three quarries during the year. He reports that the general health of the labourers in the quarries was good and that no under-age workers were detected. The permanent employees were paid monthly wages and the temporary employees on their turn over. The management provided barracks for permanent coolies, while the temporary hands were allowed to stay in the villages nearby. The barracks were kept clean by the coolies themselves. All quarries have wells which provide good and sufficient water. No latrine arrangements were made for the labourers, who made use of the nearest fields and bushes for answering their calls of nature. The managers keep medicines, dressings and splints to render first aid. In one quarry a dispensary was managed by a compounder and in another a medical practitioner was retained as Medical Officer. The third was looked after by a Sub-Assistant Surgeon from the Civil Hospital, Thatôn. No epidemic diseases were reported from these quarries.

B.—Mergui District.

During the year the Island Tin Mines, Limited, at Yamone was inspected by the District Health Officer, Mergui. The labour force numbered about 500, of whom about 100 were employed directly by the Company, the remainder being the employees of contractors. The

coolies were more or less satisfactory. Water was drawn from shallow surface wells. The manager was advised to set aside a suitable well for drinking purpose only. The District Health Officer inspected also the native mines at Kasat.

C.—Tavoy District.

The District Health Officer, Tavoy, inspected three mining camps during the year, two at Kanbouk and one at Onbinkwin village. Most of the buildings occupied by the employees of the mines were good. A coolie barracks in one of the mines was, after the inspection of the District Health Officer, thoroughly repaired and fitted with windows. The latrines in the camps were of the pit system. The water supply was from shallow wells which were numerous in number. In one mine there was a small hospital with accommodation for indoor patients and in another there was a small dispensary in charge of a compounder.

D. — Southern Shan States.

The only place where mining operation is carried out in the Karenni Subdivision is at Mawchi (Bawlake State). The Company keeps a good water supply, provides housing accommodation and gives medical relief to the workers and people there. The health of the people is generally good. A new hospital was constructed there during this year.

E.—Burma Corporation Limited, Namtu.

Sanitary State of the Area.—There was a large increase in the number of unemployed coolies in this area due to the non-return to their native villages of the Chinese temporary labourers. These coolies built bamboo huts in and around Panghai, Ehaung and Bawdwin. It was necessary to keep a strict watch on these settlements as the occupiers had primitive ideas of sanitation. The scavenging work of the sweepers was heavier and the area to be kept clean was considerably larger in extent. Trench latrines were constructed to serve these settlements and the occupiers were taught how to use them. As no epidemic of the acute intestinal infections occurred in this area during 1939, it may be taken for granted that this method of the disposal of excreta was good.

In Panghai and Ehaung the clearing of night soil from the bucket latrines by contract labour was not a success. To remedy this, a gang of sweepers who were directly under the control of the sanitary department was engaged. These men were paid the usual daily wage of their class and were controlled by a Jamadar who was responsible and saw that the latrines were cleaned daily.

Bazaar.—A new vegetable stall was erected in the centre of the Panghai Bazaar as objection was taken to the method of exposing fruits and vegetables for sale by laying them on the ground. The new stall has a cement floor which is easily cleaned by hosing with water.

The fairways of the bazaar were levelled, metalled and steam-rolled. As a result the amount of dust raised during sweeping was lessened.

A new bridge for motor and bullock cart traffic was constructed at the old ford on the Namla stream. This bridge connects Panghai and Ehaung.

The roadway in front of Ehaung Bazaar buildings was reconstructed and steam-rolled.

Food Supply.—There was no shortage of food stuffs during the year. An abundant supply of vegetables and fruits were available every day.

Milk Supply.—The milk supply was not good. All milk is adulterated with water. The consumers are to blame. They know nothing about the chemical content or the bacteriological condition of the milk and they do not care. The milk vendors will not try to supply good milk nor to improve the method of transport until the public shows its disapproval and refuses to buy milk which they know is below standard.

Water Supply.—The supply of good domestic water was plentiful throughout the year.

Notification of Births and Deaths.—The notification of all births and deaths in the area occupied by Burma Corporation, Limited, were sent every month to the Assistant Superintendent.

	Number of births notified	...	162
	Number of deaths notified	...	179
	{ Number of cases	...	7,109
	{ Number of deaths	...	94
	{ Death rate per hundred		1.31671
MALARIA.—	{ Number of Corporation employees		2,902
	{ treated for malaria		
	{ Number of Non-employees treated		4,237
	{ for malaria		

There was a definite increase during 1939 in the number of persons treated for malaria as compared with 1938.

During the year under review there was a constant immigration of Chinese coolies to this area. These had deserted from the labour gangs employed on the Burma-Yunnan Road and on the railway under construction. On arrival here, these coolies were badly nourished and in a generally poor state of health. They were admitted to hospital for treatment. In former days the immigration of casual Chinese labourers began in October. Those that got work remained in the district and the unsuccessful went to other areas to seek employment. By the end of April when work became slack, those Chinese coolies were accustomed to return to their native villages in Yunnan. During 1939 owing to the disturbed state of China the coolie class remained in Namtu and Bawdwin areas during the rains. Poorly nourished, unemployed and without proper housing these people were sick most of

LEAD POISONING.—

The female employees were examined every six months. No case of lead absorption, lead impregnation or lead poisoning were found among them.

Four coolies who were found to be unfit for exposure to lead hazard were given work in other departments where they were free from risk.

During the Annual Routine Examination, six employees found to be in a bad state of health were admitted to hospital for treatment and when restored to normal health, they were sent back to work.

The total number of examination made on employees during the year was 4,118.

Microscopical Examination of Blood of Employees.

Sections.	Stippling.		Total Number of employees examined.
	Positive.	Negative.	
Sinter Plant	89	331	420
Blast Furnaces	212	521	733
Refinery	39	364	403
Kettle Floor and Silver Room	18	102	120
Miscellaneous Section	35	329	364
Copper Plant	24	244	268
Dry Crushing Plant	7	69	76
Electric	5	97	102
Sampling	15	70	85
Watchmen ... ..	...	65	65
General gang	4	28	32
Time Office ... ..	...	13	13
Contractors' Coolies	150	614	764
Contractors' Cash Coolies	52	621	673
	650	3,468	4,118

ENTERIC GROUP OF FEVERS.—	{	Number of cases	...	...	104
	{	Number of deaths	...	...	11
	{	Death rate per hundred	...	...	10.6

There was an increased incidence of this disease during the year as compared with 1938. No common source of infection could be traced as the cases came from widely separated parts of the area.

One hundred and three persons applied for and were given inoculations against these diseases.

No severe reaction was observed after the inoculation.

DYSENTERY.—

Bacillary.—	{	Number of cases	...	...	94
	{	Number of deaths	...	...	...
Amœbic.—	{	Number of cases	...	...	66
	{	Number of deaths	...	...	...

There was an increased incidence in both these intestinal infections as compared with 1938. Neither infection appeared in epidemic form.

CHOLERA.—

Number of cases *Nil.*

All the employees and villagers who were exposed to the risk of cholera were inoculated during April. The villagers seem to have lost interest in this protection scheme probably because no case of cholera has occurred for years.

Number of persons inoculated.—	{	Employees	...	587
		Non-employees	...	153
				<hr/> 740 <hr/>

HOOKWORM.—	{	Number of cases	...	...	47
		Number of deaths	...	...	...

The patients found harbouring hookworm were admitted for treatment of other diseases. The ova were found during routine microscopical examination.

PLAGUE.—	{	Number of cases	...	11	{	Nantu	...	6
		Number of deaths	...	10		Bawdwin	...	5

During September there was an outbreak of plague in Panghai. The first case was that of a visitor from a neighbouring town, who was found dead in the bazaar compound. Smears taken from the spleen, liver and blood were examined by microscope and bacilli showing bipolar staining were found.

Anti-plague measures were started immediately. All the bazaar stalls were cleared out and disinfected. The rubbish which had accumulated for years was burnt and an intense anti-rat campaign was prosecuted. All the houses in the neighbourhood of the bazaar compound were cleaned out.

Preventive inoculation of all the inhabitants of the area was done.

Number of persons inoculated ... 10,242

In November a case of plague was admitted to Bawdwin Hospital. The patient was an employee in the Mine who had visited a district in which plague cases were occurring. Immediate steps were taken to stop the spread of the disease.

The houses were cleared out and disinfected, rats were trapped and the population of Bawdwin and Tigercamp were given anti-plague vaccine.

Number of persons inoculated ... 6,969

No case occurred since December 24th.

DIPHTHERIA —	{	Number of cases	...	...	3
		Number of deaths	...	...	2

To lower the mortality rate of this disease in the area the offer of free anti-diphtheritic serum was made to the private medical

practitioners in the area. The offer of doing a mass anti-diphtheria vaccination of the children in the area was not received favourably by the parents.

PNEUMONIA.—	{	Number of cases	...	...	97
		Number of deaths	...	...	38
		Death rate per hundred	...	...	39·17

The type of pneumonia admitted to hospital in this district for treatment showed very toxic symptoms. In at least 80 per cent of the cases there was an invasion of the meninges evidenced by cerebral signs and symptoms. The infection seemed to become generalized.

TUBERCULOSIS OF LUNGS.—	{	Number of cases	...	...	57
		Number of deaths	...	...	37
		Death rate per hundred	...	...	65

The opium addict seems to have a poor resistance to tuberculosis of the lungs. The majority of phthisical persons admitted to the isolation wards of this hospital have smoked opium for a long time. They usually are of the beggar class, unable to work and live on the charity of the inhabitants of the area.

SMALLPOX.—	{	Number of cases	...	...	3
		Number of deaths	...	...	...

An outbreak of smallpox occurred in a village outside the area near which some Forest coolies employed by Burma Corporation were working. The employees and villagers were vaccinated.

In Bawdwin a case of smallpox (an unemployed coolie) was discovered in a barrack. Two young male children who lived in the same quarters developed the disease.

Total number of vaccinations done	{	Primary	...	...	346
		Re-vaccination	...	...	253

DOG-BITE.—

Number of cases	42
-----------------	-----	-----	----

Three of these persons who sustained Class IV injuries were sent to Rangoon for treatment.

HYDROPHOBIA.—	{	Number of cases	...	...	2
		Number of deaths	...	...	2

One of the deceased who was bitten on the face by a rabid dog delayed in reporting for treatment. He was sent to Rangoon and received the full course of treatment. The other deceased was bitten by his domestic cat which animal had been bitten by a rabid dog two months previously. He did not report the bite and had not received prophylactic treatment.

DOG-CONTROL.—

This is a public health problem. The pi-dog which is partly domesticated and lives in town is the biggest danger.

One rabid dog bit 27 persons during April 1939 before it was shot by the official dog-shooter. Since then an anti-dog campaign by shooting and poisoning has been kept up.

NUTRITIONAL DISEASES.—

Beri-beri.—	{ Number of cases	...	...	10
	{ Number of deaths	...	...	...
Epidemic dropsy.—	{ Number of cases	...	...	8
	{ Number of deaths	...	...	...

In spite of the number of unemployed labourers in this area during the year, the number of diseases due to malnutrition is small.

PUERPERAL SEPSIS.—	{ Number of cases	...	...	31
	{ Number of deaths	...	...	1

The persons treated in the ward were sent to hospital from the homes where they had been delivered, in most cases by untrained midwives.

MATERNITY AND CHILD WELFARE.—

Normal Labour.—	{ Number of cases	...	...	296
	{ Number of deaths	...	...	...
Abnormal Labour.—	{ Number of cases	...	...	28
	{ Number of deaths	...	...	1

Percentage of birth requiring operative interference	...	...	...	8.642
Case mortality per hundred	...	...	...	0.30864

J. HUGHES, *M.B., B.S., B.A.O., D.P.H.*,
Chief Medical Officer.

APPENDIX D.

PORT HEALTH ADMINISTRATION DURING 1939.

AKYAB.—Incoming vessels at this port numbered 180, of which 136 came from Indian and 44 from foreign ports. They carried 21,689 passengers and 12,438 crew. All of them were medically examined on arrival and 19,250 passengers were vaccinated. Sixteen passengers were tested for rise in temperature and 9 of them were found sick with fever and ordinary illness. There were 70 vessels which sailed for ports beyond India. They carried one passenger, 1,379 Asiatic crew and 252 European crew.

KYAUKPYU.—Only coastal vessels belonging to the B.I.S.N. and B.B.S.N. companies plying between Chittagong and Rangoon *via* Akyab

called at this port. The steamers of these two companies run alternatively. No medical inspection was made of the vessels and passengers. The incoming passengers numbered 1,833 and the outgoing 1,914.

BASSEIN.—Ninety-six vessels coming from Indian and foreign ports were inspected on arrival. They carried one passenger and 6,748 crew. Of the latter 5,728 were Asiatics. The number of vessels proceeding beyond India was 17 and the effects of their 1,061 Asiatic and African members of crew were disinfected.

MOULMEIN.—Fifty-three vessels from Indian ports and 11 from foreign ports were inspected on their arrival at Moulmein Port. None of the vessels carried passengers; their crew numbered 4,203. Vessels proceeding to Indian and foreign ports numbered 42. They carried 822 passengers and 2,942 crew. Bills of health were issued on request to 20 outgoing vessels.

MERGUI.—During the year 37 incoming vessels were inspected. They carried 318 passengers and 6,136 crew. Outgoing vessels totalled 38. They carried 486 passengers and 6,333 crew.

TAVOY.—The B.I.S.N. company's steamer plying fortnightly between Rangoon and Penang called at Tavoy Port 17 times on its homeward journey during the year. Passengers numbering 326, who landed at Tavoy from the steamers were examined by the Sub-Assistant Surgeon on duty. The steamer discontinued from plying from September 1939.

ANNUAL REPORT OF THE PORT HEALTH OFFICER OF RANGOON FOR THE YEAR 1939.

Inspection of Incoming Vessels.

1. INCOMING VESSELS INSPECTED.—The total number of cargo and passenger vessels inspected in the year was 1,228 or 19 more than in 1938. Of these 804 were from Indian and 424 from foreign ports. They carried 116,126 crew and 242,411 passengers (inclusive of 20,757 through passengers), the figure being 604 less and 26,321 more than that of 1938 respectively. In addition, a number of passengers totalling 5,325 from ports in Burma were examined at Rangoon. These passengers embarked at Akyab, Kyaukpyu and Sandoway on vessels which were on their way to Rangoon from Indian ports.

2. INFECTIOUS DISEASES.—Seventeen cases of infectious diseases (five less than in 1938) were reported by Commanders on 15 vessels, *viz.*, 10 chicken-pox, 5 measles, 1 mumps and 1 cerebro-spinal meningitis. All the cases were sent to the Contagious Diseases Hospital, Rangoon, with the exception of 3 cases of chicken-pox and 2 cases of measles which were left at other ports. One case of mumps being a through passenger was allowed to stay on board under the care of the Ship's Surgeon.

The following unreported cases of infectious diseases were detected on 31 vessels by the Port Health Staff during the course of Medical Inspection.

One case of smallpox, 1 case of cholera, 23 cases of chicken-pox, 9 cases of measles, 1 case of typhoid and 1 case of cerebro-spinal meningitis. They were removed to the Contagious Diseases Hospital, Rangoon, with the exception of two cases of measles which were allowed to go to their residences.

Seventeen lepers were found during the inspection of the passengers.

The following cases are reported briefly as they appear to me to be of some interest :—

(a) *Occurrence of one death from Plague in a cargo boat No. 763.*—On the 25th January 1939 a letter was received from the Contagious Diseases Hospital, Rangoon, about a case of plague on cargo boat No. 763. The patient was admitted into the hospital on the 21st January 1939 and died on the following day. The boat was brought to the Port Health Station and fumigated with SO_2 and all the contacts were disinfected. The remaining members of the crew were examined and inoculated against plague. A detailed report was sent to the Director of Public Health, Burma, Rangoon, on the 30th January 1939.

(b) *Occurrence of a case of Smallpox on board S.S. "Liebenfels."*—On the 7th June 1939 a letter was received from the Contagious Diseases Hospital that one Abdul Gunny crew of S.S. "Liebenfels," admitted into hospital on the 2nd June 1939 by the Company's doctor was diagnosed as a case of smallpox. The entire effects of the crew were disinfected by steam and other sanitary measures were taken by this department. Eleven crew who possessed no recent vaccination mark were re-vaccinated.

3. DEATHS FROM NON-INFECTIOUS DISEASES.—Six such deaths were reported on six vessels.

4. VACCINATION PERFORMED.—The number of passengers examined under the Vaccination Act was 242,411—of these 114,072 were found protected against smallpox and 128,339 were vaccinated. In addition, 14 vaccinations were performed among the members of the ships' crew. The large number of vaccination totalling 128,353 is satisfactory and constitutes a very important preventive measure against smallpox not only for Rangoon, but also for the whole country.

5. DISINFECTION.—Thirty-three vessels were disinfected by this department during the year.

6. RIVERINE VESSELS.—The following deaths and cases were reported on riverine launches and cargo lighters during the year :—

Four deaths from non-infectious diseases, 1 case of plague, 2 cases of cholera, 1 case of smallpox, 5 cases of chicken-pox, 1 case of mumps

and 1 fever case. All the precautionary measures were taken by this department.

Inspection of Outgoing Sea-going Vessels.

There were 544 vessels proceeding to ports beyond India or 28 less than in 1938. The effects of all the members of the Asiatic and African members of the crew 35,485 in number and deck passengers 13,251 in number were disinfected. European crew totalling 13,080 and saloon passengers 3,668 were inspected. Vaccination was done on 247 crew and 686 passengers.

Coolies totalling 2,433 were inspected and their body clothes and uniforms were disinfected in steam prior to their handling passengers' luggages.

Temperature was tested on 173 members of crew and passengers. Three were found to be normal. Of the rest 143 were allowed to embark on the Commander's responsibility. Twenty-four were sent to hospitals in Rangoon and 3 were allowed to go to their residences.

No case of plague is known to have developed amongst the crew and passengers of these vessels on their outward voyages.

8. New members of the crew inspected prior to signing on the ships articles totalled 3,531. Of these 3,472 were passed fit and 59 were rejected. Two thousand four hundred and fifty-seven members of the crew were revaccinated.

9. VESSELS IN HARBOUR.—The following cases and deaths were reported on 14 vessels in harbour during the year. Three deaths from non-infectious diseases, one case of smallpox, one case of chicken-pox and nine cases of fever.

All the necessary sanitary measures were taken by this department.

10. Inspection of measures to prevent ingress of rats into vessels at wharves was carried out.

11. CHLORINATION OF WATER.—Chlorination of water was carried out on five water barges during the year.

12. PASSENGERS BY SEA-PLANES.—Six hundred and eleven incoming and 770 outgoing passengers by sea-planes were inspected during the year at the time of embarkation and disembarkation.

Miscellaneous transactions and remarks.

13. PORT OFFICE PERSONNEL.—Two hundred and thirty-one men were examined, out of which 225 were passed fit and six rejected. One hundred and ninety seven were revaccinated.

14. FUMIGATION.—(a) Thirty-three vessels were fumigated to comply with the measures in force at the ports of destination. One thousand one hundred and thirty-four rats were destroyed. This figure

represents the number of rats which were found in empty vessels only, after fumigation. The number of rats destroyed on loaded vessels could not be ascertained as they left the harbour immediately after fumigation.

No. of vessels.	Loaded.	Empty.	Rats collected.	Rats destroyed.	Rats examined.	Rats found infected with plague.
33	9	24	1,134	1,134	76	<i>Nil</i>

(b) Deratization exemption certificates were issued to 60 vessels after inspection. One hundred and eight rats were destroyed.

No. of vessels.	No. of Traps.	Rats collected.	Rats destroyed.	Rats examined.	Rats found infected with plague.
60	6,931	108	108	106	<i>Nil</i>

(c) Number of pamphlets on venereal diseases distributed among 58 ships' crew were 672 in English and 1,130 in Chittagonian languages during the year.

15. INOCULATION AGAINST CHOLERA.—(a) Five hundred and fifty six anti-cholera inoculations were carried out on passengers and members of crew.

(b) INOCULATION AGAINST PLAGUE.—Six persons were inoculated against plague by this department.

16. Non-infectious cases reported and detected were 1,112.

17. INSPECTION OF PROVISIONS FOR LASCAR CREW.—The provisions for Asiatic crew on 262 ships were examined. Two hundred and fifteen samples were taken and analysed at the Harcourt Butler Institute of Public Health, Burma, Rangoon. The results were as follows :—

Samples.				Good.	Unsatisfactory.
Rice	...	...	...	58	28
Ghee	...	...	...	99	7
Mustard oil	...	...	...	2	13
Flour	...	...	...	2	...
Atta	...	...	...	1	...
Sugar	...	...	...	1	...
Wheat flour	...	...	...	1	1
Dhal	...	...	..	1	1
				165	* 50

* Replaced by articles of good quality.

Out of 86 samples of rice examined, 17 samples were from the Port Commissioners' Stores Department who supply rations to the crews of their flotilla. Of these, 11 samples were found to be good and six bad. Recommendations to that effect were made.

Four thousand two hundred and fifty tins of ghee mostly belonging to Messrs. The British India Steam Navigation Company, Limited, Rangoon, were examined by this department and sealed. Samples taken from these tins were on examination found to be genuine.

18. INSPECTION OF MEDICINE CHESTS AND APPLIANCES.—During the year medicines and appliances on eighteen vessels were inspected and eleven were found to be short. The agents were written to and the defects were remedied.

PORT COMMISSIONERS' AREA—(a) *Sanitation*.—The sanitation of the Port Commissioners' area which runs on the north side of the river from Neikban to Monkey Point and thence to the Salt Depôt, as well as part of Kanaungto, Dalla, King's Bank, Syriam Signal Station, River Lights and Mingaloon Radio Station was under my charge. The 1931 census gives the population of the area as 16,926. The following health staff was employed by the Port Commissioners :—

Sanitary Inspector	...	...	...	1
Assistant Sanitary Inspectors		...	...	2
Sanitary Sub-Inspector	...	...	...	1
Sanitary Clerk	...	...	...	1
Sanitary Jemadars	...	...	...	2
Sanitary Maistries	...	...	...	7
Sanitary Permanent Coolies	...	...	...	106
Peon	...	...	...	1
Plumber	...	...	...	1

The sanitation of the area was kept at a high standard.

(b) The annual vaccination of all the employees of the Port Commissioners was commenced on the 31st January 1939 and was completed on the 7th March 1939. All the employees were examined and re-vaccinated. The total number of vaccinations performed was 3,532.

(c) *Stegomyia Mosquito Control*.—All the buildings and godowns in the Port Commissioners area are numbered and two Assistant Inspectors and four coolies search the area every morning for the breeding places. The work starts on a Monday and is finished on a Friday. It is usually done in the morning for a period of 2½ hours during which time all the likely breeding places are inspected. In the afternoon any larvæ caught in the area are brought to the office, identified and recorded. On Saturdays the figures of the five previous days are compiled and weekly statements made out. The coolies are also trained to look for likely places and to oil regularly these places in order to destroy any

larvaë which may be present. During the month of May just after the monsoons had set in, oil balls were put in all the roof gutters of the various buildings and godowns. These balls are inspected every month and fresh oil added until October when the rains are over. The *Stegomyia* Index of the Port area for the year was found to be as low as 1.71.

(d) *Ratting and trapping*.—The total number of rats destroyed by trapping during the year was 3,292.

(e) *Cymag Fumigation of Rat Burrows*.—Besides trapping, cymag fumigation of rat burrows in the area was carried out throughout the year. A total of 2,943 burrows were gassed and the 8,233 connecting holes were blocked during the year. The total number of rats destroyed during the year by this method was 408.

(f) *Smoking out of Rat Burrows*.—A total of 17,923 rat holes were smoked with coal tar fumes. The number of rats destroyed by this method was 1,452.

(g) Five thousand one hundred and fifty-two rats were caught and destroyed in the Port Commissioners' area by trapping, smoking and cymag fumigation throughout the year. Out of these, 2,681 were sent to the Harcourt Butler Institute of Public Health, Burma, Rangoon, for examination. The following statement shows the species of rats examined at the Institute :—

No. of rats.	Species.						Kind of bait.	No. of infected rats.
	N. Beng.	R. Ratt.	M. Con.	R. Norv.	M. Mus.	C. Coe.		
2,681	1,050	161	559	197	462	252	Bread and ghee.	Nil.

(h) *Inspection of Meat and Food*.—Inspection of imported food is done by the Municipal Health Department. In case where the consignment is not taken delivery of for some time on account of its being unsatisfactory, the Port Health Officer is requested by the Traffic Manager, Port Commissioners, Rangoon, to do the inspection and make recommendation regarding its disposal. Several such inspections were carried out.

19. PORT HEALTH STAFF.—The staff has worked to my satisfaction.

J. A. ANKLESARIA,
K-i-H., M.B., B.S., D.P.H.,
Port Health Officer, Rangoon.

TABLE No. I.—Details of In-coming Sea-going Vessels inspected during the year 1939.

Month.	From Indian Ports.					From Foreign Ports.					Total.					
	Number of vessels.	Number of crew.	Number of Passengers.				Number of crew.	Number of Passengers.				Number of vessels.	Number of crew.			
			Males.	Females.	Boys.	Girls.		Total.	Males.	Females.	Boys.			Girls.	Total.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
...	70	7,126	13,262	1,115	616	426	15,419	36	3,428	1,011	291	121	88	1,511	106	10,554
January	67	6,511	17,183	1,479	956	481	20,099	36	3,386	828	213	90	58	1,189	103	9,897
February	71	6,498	13,015	1,240	570	427	15,252	44	3,769	878	293	156	138	1,465	115	10,267
March	84	7,574	11,468	1,272	640	413	13,793	39	3,399	1,768	341	107	98	2,314	123	10,973
April	69	6,902	18,234	2,218	1,050	811	22,313	42	3,847	1,587	316	115	117	2,135	111	10,749
May	69	6,446	15,527	1,703	871	692	18,793	35	3,414	1,292	316	121	86	1,815	104	9,860
June	60	5,647	13,009	1,262	551	427	15,249	39	3,633	969	205	71	81	1,326	99	9,280
July	65	5,939	14,866	1,388	554	482	17,290	34	3,486	1,109	242	85	58	1,494	99	9,375
August	58	5,685	13,647	1,499	533	595	16,274	32	2,679	690	149	46	46	931	90	8,364
September	63	6,141	14,416	1,200	683	475	16,774	34	3,503	1,151	185	60	54	1,450	97	9,644
October	59	6,177	23,931	1,279	832	463	26,505	24	2,090	724	111	49	30	914	83	8,267
November	69	6,679	24,204	1,521	895	561	27,181	29	2,217	707	134	38	46	925	98	8,896
December	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	804	77,325	192,762	17,176	8,751	6,253	224,942	424	38,801	12,714	2,796	1,059	900	17,469	1,228	116,126

TABLE No. II.—Details of Outgoing Sea-going Vessels bound for Ports beyond India, inspected during the year 1939.

Month.	(1)	Shore Inspection.														Results of Inspection.				
		(2)	Deck Passengers.					(9)	Saloon Passengers.					(15)	(16)	Temperatures.				
			(4)	(5)	(6)	(7)	(8)		(10)	(11)	(12)	(13)	(14)			(17)	(18)	(19)	(20)	
																				Asiatic crew.	Males.	Females.	Boys.	Girls.	Total.	Passes to relatives and friends.	Baggage coolies.	Tested.	Normal.	Allowed on medical certificate or at Commanders' request.	Cases detained.
January	...	44	2,987	1,089	101	41	30	1,261	885	147	112	15	10	284	16	250	21	...	18	3
February	...	46	3,302	741	58	14	18	831	885	206	182	9	19	416	34	194	19	...	16	3
March	...	70	3,930	863	127	48	48	1,086	3,510	240	213	33	34	520	68	240	7	...	6	1
April	...	60	3,687	1,343	151	84	64	1,642	1,262	258	196	43	40	537	63	297	12	...	11	1
May	...	54	3,475	1,031	137	65	52	1,285	1,043	209	142	17	17	385	43	209	7	...	7	...
June	...	47	3,171	869	115	37	48	1,069	1,043	178	137	20	22	357	69	222	36	3	28	5
July	...	48	2,915	830	84	30	34	978	975	116	61	12	6	195	23	155	13	...	9	4
August	...	39	2,497	974	90	39	27	1,130	814	145	60	13	21	239	61	192	19	...	15	4
September	...	30	2,428	881	120	42	39	1,082	510	114	78	15	25	232	10	182	12	...	9	3
October	...	34	2,320	581	78	25	40	724	686	91	40	4	10	145	10	108	3	...	2	1
November	...	34	2,459	1,054	82	21	28	1,185	805	97	51	19	20	187	4	218	17	...	15	2
December	...	38	2,314	839	73	36	30	978	662	106	44	10	11	171	...	166	7	...	7	...
Total	...	544	35,485	11,095	1,216	482	458	13,251	13,080	1,907	1,316	210	235	3,668	401	2,433	173	3	143	27

TABLE NO. II.—Details of Outgoing Sea-going Vessels bound for Ports beyond India, inspected during the year 1939—concl.

Month.	Diseases.				Disposal of Sick.					Disinfection.				Fumigation with Clayton Apparatus at agent's request.				Vaccination.	
	Plague. (21)	Small-pox. (22)	Chicken-pox. (23)	Fever and other ailments. (24)	Civil General Hospital. (25)	Municipal Observation Hospital. (26)	Contagious Diseases Hospital. (27)	Passengers' residence. (28)	Other Hospitals. (29)	Asiatic crew and deck passengers. (30)	Boots and shoes. (31)	Baggage coolies. (32)	Boxes. (33)	Vessels. (34)	Sulphur consumed. (35)	Time spent. (36)	Amount realized and Fees. (37)	Crew. (38)	Passengers. (39)
January	3	...	3	..	...	...	4,248	...	250	304	2	lb. 2,322	H. 21 M. 30	Rs. 650 75	16	64
February	3	...	1	...	2	...	4,133	...	194	397	4	5,039	47 30	1,350 25	30	34
March	1	...	...	...	1	...	...	5,016	...	240	407	2	2,848	24 0	1,375 750 75	21	60
April	1	...	1	...	...	...	5,329	...	297	396	2	3,370	27 15	825 800 50	46	130
May	4,760	...	209	474	4	4,893	40 45	850 1,350 75 1,425	42	70

[illegible]

TABLE No. III.—Statement showing the Infections and other Diseases reported and detected on Incoming Sea-going and Riverine Vessels during the year 1939.

Diseases.	Seagoing.				Riverine.		In Port.		Disposal of Cases.								Corpses.				Remarks.		
	Number of vessels.	Cases.			Number of vessels.	Cases.	Number of vessels.	Cases.	Hospitals.								Buried at Sea.	Rangoon Mortuary.	Buried by relatives.	Total.			
		Total.	Reported.	Detected.					Contagious Diseases.	Observation.	Rangoon General Hospital.	Military.	Lepers.	Residence.	Left on Board.	Left at other Ports.						Other Hospitals.	Total.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Plague	1	1	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Cholera	...	1	...	1	1	2	...	...	3	...	...	...	...	...	...	...	...	3	...	...	...	...	...
Smallpox	...	1	...	1	1	1	1	1	2	...	...	...	...	...	...	1	...	3	...	...	...	...	...
Chickenpox	...	29	34	10	24	5	1	1	37	...	...	...	...	...	...	3	...	40	...	...	...	...	...
Measles	...	12	14	5	9	...	...	...	10	...	...	...	...	2	...	2	...	14	...	...	...	...	...
Mumps	...	1	1	1	1	1	...	...	1	...	...	...	...	...	1	...	...	2	...	...	...	...	...
Typhoid	...	1	1	...	1	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...

Cerebrospinal meningitis	2	2	1	1	...	...	...	...	...	1	1	...	...	...	...	...	...	...	2	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Suspicious illness	...	252	697	19	678	1	1	4	4	5	697	...	...	...	...	...	...	702	...	...	...	...	...
Ordinary illness	...	229	388	59	329	...	...	5	5	...	...	30	6	...	51	294	...	12	393	...	...	...	...
Leprosy	...	15	17	2	15	...	...	...	...	...	...	...	...	2	12	3	...	...	17	...	...	...	...
Enlarged glands	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths (ordinary)	...	6	6	6	...	4	4	3	3	...	...	...	...	...	...	...	...	...	...	6	7	...	13
Total	...	549	1,162	103	1,059	14	15	14	14	61	698	30	6	2	65	298	6	12	1,178	6	7	...	13

STATEMENT A.—*Statement showing Total Income from all sources and*

Name of Division.		Total Receipts including opening balance.	Total Ex- penditure on Public Health purposes.	Amount			
				Water supply.		Drainage.	
				Capital outlay. (4)	Establish- ment, repairs, etc. (5)	Capital outlay. (6)	Establish- ment, repairs, etc. (7)
(1)		(2)	(3)				
		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Towns in—							
Arakan Division	...	3,57,287	1,48,029	209	20,437	...	3,432
Pegu Division	...	3,24,61,909	78,27,930	44,20,604	7,20,568	5,547	2,58,231
Irrawaddy Division	...	16,98,468	3,87,172	...	17,022	469	9,565
Tenasserim Division	...	15,45,733	3,64,042	679	43,018	841	6,681
Magwe Division	...	8,21,592	2,10,692	816	55,904	...	5,768
Mandalay Division	...	26,29,046	6,25,877	4,067	59,658	...	31,997
Sagaing Division	...	6,48,556	1,34,763	27	8,526	...	2,348
Total	...	4,01,62,591	96,98,505	44,26,402	9,25,133	6,857	3,18,022
Districts in —							
Arakan Division	...	7,92,259	46,814	...	766	...	...
Pegu Division	...	32,85,402	1,95,632	10,523	6,364	...	...
Irrawaddy Division	...	34,86,988	1,89,965	6,878	5,441	...	...
Tenasserim Division	...	22,90,277	78,956	1,863	48	...	...
Magwe Division	...	14,27,434	1,09,692	1,479	3,844	...	...
Mandalay Division	...	14,72,506	1,06,624	363	2,547	...	...
Sagaing Division	...	17,41,256	1,14,111	3,401	2,761	...	554
Total	...	1,44,96,122	8,41,794	24,507	21,771	...	554
GRAND TOTAL, BURMA	...	5,46,58,713	1,05,40,299	44,50,909	9,46,904	6,857	3,18,576
Federated Shan States—							
Towns	...	2,80,630	78,219	1,955	14,599	...	5,642
Rural Areas	...	1,22,42,437	80,202	...	2,851	10,828	4,489
Total	...	1,25,23,067	1,58,421	1,955	17,450	10,828	10,131

Expenditure on Public Health purposes during the financial year 1938-39.

spent on

Conservancy (including road cleaning and watering) and latrines. (8)	Epidemic charges (includ- ing plague). (9)	Vaccination. (10)	Registration of births and deaths. (11)	Markets and slaughter-houses. (12)	Charges on account of Health Officers and Public Health Inspectors. (13)	Other sanitary requirements. (14)
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
78,352	2,170	2,698	1,463	21,064	12,933	5,271
14,34,778	11,267	54,213	56,973	3,22,178	2,85,360	2,58,211
1,99,185	9,883	9,168	6,408	86,202	37,629	11,641
1,90,240	4,433	7,390	7,417	60,863	37,126	5,354
85,276	4,038	5,161	1,943	30,661	17,959	3,166
3,16,559	17,157	10,307	8,415	1,04,518	62,655	10,544
78,899	666	3,169	1,785	25,247	9,708	4,388
23,83,289	49,614	92,106	84,404	6,50,733	4,63,370	2,98,575
7,665	534	22,795	...	6,457	7,468	1,129
34,232	2,051	47,312	...	60,962	32,727	1,461
29,986	1,332	57,678	...	59,659	28,072	909
6,738	2,100	50,111	...	7,915	9,649	532
28,269	4,875	31,511	...	23,375	13,142	3,197
29,969	7,268	28,514	...	18,821	18,523	619
38,740	6,777	39,264	...	6,916	14,686	1,012
1,75,599	24,937	2,77,185	...	1,84,115	1,24,267	8,859
25,58,888	74,551	3,69,291	84,404	8,34,848	5,87,637	3,07,434
30,392	2,461	916	1,510	13,295	4,084	3,365
12,461	4,424	24,540	...	2,982	5,614	12,013
42,853	6,885	25,456	1,510	16,277	9,698	15,378

STATEMENT B.—Table showing Health Services in Rural and

District.		Rural Areas.									
		Medical Officers of Health				Public Health Inspectors.	Inspectors of Vaccination.	Vaccinators.		* Epidemic Staff.	School Medical Officers.
		Holding D.P.H.		Holding L.P.H.				Male.	Female.		
		Whole-time.	Part-time.	Whole-time.	Part-time.						
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Akyab	...	1	...	...	...	2	1	11	...	...	...
Arakan Hill Tracts	...	...	...	...	...	...	...	3	...	...	...
Kyaukpyu	...	...	...	...	...	1	...	6	...	...	...
Sadoway	...	...	...	...	...	1	...	3	...	...	...
Rangoon	...	...	...	...	...	...	...	...	...	...	...
Pegu	...	...	...	...	...	1	2	7	...	...	...
Tharrawaddy	...	...	...	...	...	2	1	10	...	...	...
Hanthawaddy	...	1	...	...	...	2	...	8	...	...	...
Insein	...	2	...	...	...	5	...	5	...	...	...
Prome	...	...	...	...	...	3	...	8	...	...	...
Bassein	...	...	...	...	...	4	1	11	...	...	...
Henzada	...	...	...	...	...	3	...	12	...	...	...
Myaungmya	...	1	...	...	...	3	1	11	...	...	...
Maubin	...	...	...	...	...	3	1	9	...	...	...
Pyapôn	...	1	...	...	...	3	1	8	...	...	...
Salween	...	...	...	...	...	1	...	4	...	...	...
Thatôn	...	...	...	...	...	2	1	12	...	...	...
Amherst	...	...	...	...	...	3	1	8	...	...	...
Tavoy	...	...	...	...	...	1	1	5	...	...	...
Mergui	...	...	...	...	...	2	...	5	...	...	...
Toungoo	...	...	...	...	...	1	1	11	...	...	...
Thayetmyo	...	...	...	...	...	2	...	7	...	...	...
Minbu	...	...	...	...	...	2	...	6	...	...	...
Magwe	...	...	...	...	...	3	...	7	...	...	...
Pakôkku	...	...	...	...	...	2	...	8	...	...	...
Chin Hills District	...	...	...	...	...	...	1	6	...	...	...
Mandalay	...	...	...	...	...	2	...	5	...	...	...
Kyauksè	...	...	...	...	...	1	1	4	...	...	...
Meiktila	...	...	...	...	...	2	...	4	...	...	...
Myingyan	...	...	...	...	...	3	...	10	...	...	...
Yamèthin	...	...	...	1	...	3	...	6	...	...	...
Bhamo	...	...	...	...	...	1	...	6	...	...	...
Myitkyina	...	...	...	...	...	1	...	8	...	...	...
Shwebo	...	...	...	...	...	3	...	10	...	...	...
Sagaing	...	...	...	...	...	2	...	6	...	...	...
Katha	...	...	...	...	...	2	1	6	...	...	...
Upper Chindwin	...	...	...	...	...	1	1	7	...	...	...
Lower Chindwin	...	...	...	...	...	2	...	7	...	...	...
Northern Shan States	...	...	...	...	...	3	1	23	...	...	...
Southern Shan States	...	...	...	...	...	1	‡ 3	24	...	...	...
Provincial	...	...	...	...	...	...	...	...	...	(a) 37	...
Total	...	6	...	1	...	79	20	317	...	(a) 37	...

* This column should not include officers already noted in columns 2—5 or 13—16 nor should it include peons coolies and menials such as sweepers, etc.

† Other health staffs should include food and water analysts, leprosy specialists or similar other important public health appointments but not menials, etc., e.g., sweepers, bhistis, laboratory assistants, etc.

‡ Head vaccinators.

(a) 32 Epidemic Sub-Assistant Surgeons and 5 Assistant District Health Officers.

(b) 1 Special Leprosy Officer, 1 Sub-Assistant Surgeon attached to the Special Leprosy Officer, 2 Sub-Assistant Surgeons attached to the Bacteriological Department, 1 Sub-Assistant Surgeon attached to the Vaccine Depôt, Meiktila and 1 Sub-Assistant Surgeon attached to the Port Health Department at Akyab.

Urban Areas of Burma during 1939.

Urban Areas.												
† Other Health Staffs. (12)	Medical Officers of Health				Medical Registrars. (17)	Public Health Inspectors. (18)	Inspectors of Vaccination. (19)	Vaccinators.		* Epidemic Staff. (22)	School Medical Officers. (23)	† Other Health Staffs. (24)
	Holding D.P.H.		Holding L.P.H.					Male. (20)	Female. (21)			
	Whole-time.	Part-time.	Whole-time.	Part-time.								
	(13)	(14)	(15)	(16)								
...	1	...	...	...	1	1	...	3	...	...	...	...
...
...	...	...	...	...	...	1	...	...	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	7	...	...	...	14	48	...	21	...	...	...	35
...	1	...	1	...	...	2	...	2	...	...	...	...
...	...	...	...	...	...	6	...	6	...	...	...	...
...	...	1	...	...	1	3	...	1	...	...	...	1
...	1	...	1	...	...	3	...	3	...	...	...	...
...	1	...	1	...	...	3	...	3	...	...	...	...
...	1	...	...	...	1	5	...	4	...	...	...	...
...	1	...	...	...	...	4	...	3	...	1	...	...
...	...	...	...	...	...	3	...	3	...	...	...	...
...	...	...	...	...	...	3	...	3	...	...	...	...
...	...	...	...	...	...	2	...	2	...	...	...	...
...
...	...	...	1	...	...	2	...	2	...	...	...	...
...	...	...	...	...	1	6	...	3	...	...	...	...
...	...	...	...	...	...	2	...	2	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	3	...	2	...	...	...	...
...	...	...	1	...	...	1	...	2	...	...	...	...
...	...	...	...	...	...	2	...	1	...	...	...	...
...	...	...	...	...	...	4	...	4	...	...	...	...
...	...	...	1	...	...	1	...	1	...	...	...	...
...
...	2	...	...	...	3	12	...	5	...	2	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	1	...	...	2	...	2	...	...	...	...
...	...	...	1	...	...	3	...	2	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	2	...	1	...	...	...	...
...	...	...	...	...	...	1	...	2	...	...	...	...
...
...	...	...	...	...	...	1	...	...	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	1	...	1	...	...	...	...
...	...	...	...	...	...	2	...	2	...	...	...	...
(b) 6	...	...	...	...	...	...	...	...	...	...	...	...
(b) 6	15	1	8	...	21	136	...	93	...	3	...	36

NOTE.—In addition to the above, the following personnel were employed :—4 whole-time Medical Officers of Health holding D.P.H., 7 Public Health Inspectors by the Burma Railways, Rangoon ; 1 whole-time Medical Officer of Health holding D.P.H., 3 Public Health Inspectors and 1 School Medical Officer by the Burma Corporation, Ltd., Namtu ; 1 part time Medical Officer of Health holding D.P.H. and 1 Public Health Inspector by the Port Commissioners, Rangoon, and 1 whole-time Medical Officer of Health holding D.P.H., 2 whole-time Medical Officers of Health holding L.P.H. and 1 Public Health Inspector by the Burma Oil Company, Ltd., Syriam and 1 part-time Medical Officer of Health, 1 part-time Assistant Medical Officer of Health and one Public Health Inspector by the Mawchi Mines, Ltd , Mawchi.

STATEMENT C.—Table showing Maternity and Child Welfare Centres, Health Visitors and Trained Midwives in Rural and Urban Areas in Burma during 1939.

Maternity and Child Welfare.												
Districts. (1)	Centres maintained by						Trained Visitors.		Trained Midwives. *		Trained Dais.	
	Government.		Local and Muni- cipal Bodies.		Other Agencies.							
	Rural. (2)	Urban. (3)	Rural. (4)	Urban. (5)	Rural. (6)	Urban. (7)	Rural. (8)	Urban. (9)	Rural. (10)	Urban. (11)	Rural. (12)	Urban. (13)
Akyab	1	...	...	1	3	...	...
Arakan Hill Tracts...
Kyaukpyu	1	1	...	...
Sandoway	2	1	...	...
Rangoon	4	...	2	...	10	...	16	...	...
Pegu	1	...	1	11	4	...	...
Tharrawaddy	1	...	...	5	7	...	...
Hanthawaddy	2	...	1	7	3	...	...
Insein ...	2	...	...	...	...	...	1	...	9	3	...	...
Prome	1	...	1	5	5	...	...
Bassein	2	...	1	6	6	...	...
Henzada	1	...	1	9	5	...	...
Myaungmya	5	3	...	...
Maubin	8	3	...	...
Pyapôn	1	...	...	3	2	...	...
Salween
Thatôn	1	...	1	10	3	...	...
Amherst	2	...	1	14	5	...	...
Tavoy	3	2	...	...
Mergui	1	...	...	1	4	...	...
Toungoo	1	...	1	...	3	...	...
Thayetmyo	1	...	...	4	2	...	...
Minbu	1	...	1	...	2	...	...
Magwe	4	...	3	4	5	...	...
Pakôkku	2	1	...	...
Chin Hills
Mandalay	4	...	3	...	12	...	...
Kyauksè	1	...	...	4	1	...	...
Meiktila	1	...	1	3	1	...	...
Myingyan	1	2	...	...
Yamèthin ...	2	...	...	...	...	2	1	2	3	5	...	...
Bhamo	1	...	1	2	1	...	...
Myitkyina	1	...	...
Shwebo	1	...	1	3	3	...	...
Sagaing	1	...	...	12	2	...	...
Katha	5	...	...	...
Lower Chindwin	1	...	1	5	1	...	...
Upper Chindwin
Northern Shan States	1	...	1	...	11	1	...	...
Southern Shan States	1	...	1	29	2	...	...
Total ...	4	4	1	36	3	32	188	121

* Excludes Midwives employed on Child Welfare work alone.





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pasted at the end.

ANNUAL STATEMENT NO. I.--*Births registered in the*

1	2	3			4		
No.	Divisions and Districts.	Population according to Census of 1931.			Number of births registered.		
		Male.	Female.	Total.	Male.	Female.	Total.
ARAKAN DIVISION.							
1	Akyab	338,592	296,940	635,532	11,059	10,026	21,085
2	Kyaukpyu	107,729	112,563	220,292	3,473	3,196	6,669
3	Sandoway	64,206	65,039	129,245	1,873	1,801	3,674
PEGU DIVISION.							
4	Rangoon	271,063	129,352	400,415	6,037	5,474	11,511
5	Pegu	253,960	235,851	489,811	8,537	8,263	16,800
6	Tharrawaddy	251,303	254,507	505,810	9,181	8,816	17,997
7	Hanthawaddy	218,919	189,912	408,831	7,286	6,906	14,192
8	Insein	175,519	155,933	331,452	5,827	5,618	11,445
9	Prome	203,171	207,480	410,651	7,346	6,856	14,202
IRRAWADDY DIVISION.							
10	Bassein	292,029	279,014	571,043	10,480	10,247	20,727
11	Henzada	304,995	310,794	615,789	10,375	10,079	20,454
12	Myaungmya	235,655	209,129	444,784	8,637	8,105	16,742
13	Maubin	188,770	182,739	371,509	6,979	6,521	13,500
14	Pyapôn	179,554	154,604	334,158	5,788	5,875	11,663
TENASSERIM DIVISION.							
15	Thatôn	274,942	257,686	532,628	9,681	9,137	18,818
16	Amherst	270,677	245,556	516,233	9,332	9,061	18,393
17	Tavoy	92,637	87,327	179,964	3,359	3,221	6,580
18	Mergui	85,263	76,724	161,987	2,522	2,394	4,916
19	Toungoo	220,010	208,818	428,828	6,644	6,317	12,961
MAGWE DIVISION.							
20	Thayetmyo	135,565	138,612	274,177	5,341	5,501	10,842
21	Minbu	136,662	141,214	277,876	4,749	4,568	9,317
22	Magwe	250,783	248,790	499,573	9,216	8,992	18,208
23	Pakôkku	241,137	258,044	499,181	10,031	9,553	19,584
MANDALAY DIVISION.							
24	Mandalay	191,741	179,895	371,636	7,335	6,680	14,015
25	Kyauksè	74,880	76,440	151,320	2,526	2,413	4,939
26	Meiktila	147,171	162,828	309,999	4,827	4,855	9,682
27	Myingyan	228,784	243,773	472,557	5,720	5,774	11,494
28	Yamèthin	194,318	196,502	390,820	9,476	9,149	18,625
SAGAING DIVISION.							
29	Shwebo	214,170	232,620	446,790	9,843	9,930	19,773
30	Sagaing	159,881	176,084	335,965	6,862	6,804	13,666
31	Lower Chindwin	178,543	204,891	383,434	7,687	7,577	15,264
Total		6,182,629	5,919,661	12,102,290	218,029	209,709	427,738

Districts of Burma during the year 1939.

5			6	7	8	9			No.
Ratio of births per 1,000 of population.			Number of males born to every hundred females.	Excess of births over deaths per 1,000 of population.	Excess of deaths over births per 1,000 of population.	Mean ratio of births per 1,000 during previous five years.			
Male.	Female.	Total.				Male.	Female.	Total.	
17·40	15·78	33·18	110	13	...	17·03	15·54	32·58	1
15·77	14·51	30·27	109	13	...	14·46	13·62	28·08	2
14·49	13·93	28·43	104	9	...	15·67	14·64	30·31	3
15·08	13·67	28·75	110	...	...	13·68	12·97	26·65	4
17·43	16·87	34·30	103	13	...	14·28	13·51	27·79	5
18·15	17·43	35·58	104	10	...	17·94	17·05	34·99	6
17·82	16·89	34·71	106	14	...	16·79	15·81	32·60	7
17·58	16·95	34·53	104	12	...	15·03	14·42	29·45	8
17·89	16·70	34·58	107	3	...	17·20	16·22	33·43	9
18·35	17·94	36·30	102	14	...	16·02	15·39	31·42	10
16·85	16·37	33·22	103	9	...	15·75	14·86	30·61	11
19·42	18·22	37·64	107	17	...	16·84	15·82	32·65	12
18·79	17·55	36·34	107	12	...	18·38	17·52	35·91	13
17·32	17·58	34·90	99	6	...	16·18	16·38	32·56	14
18·18	17·15	35·33	106	16	...	13·82	13·38	27·21	15
18·08	17·55	35·63	103	18	...	17·66	16·96	34·61	16
18·66	17·90	36·56	104	13	...	18·49	17·92	36·40	17
15·57	14·78	30·35	105	10	...	16·31	15·72	32·04	18
15·49	14·73	30·22	105	10	...	15·01	14·43	29·44	19
19·48	20·06	39·54	97	9	...	14·95	14·99	29·94	20
17·09	16·44	33·53	104	5	...	17·78	17·05	34·83	21
18·45	18·00	36·45	102	10	...	15·85	15·65	31·50	22
20·09	19·14	39·23	105	11	...	19·55	19·50	39·05	23
19·74	17·97	37·71	110	10	...	20·64	18·61	39·25	24
16·69	15·95	32·64	105	3	...	17·35	16·96	34·31	25
15·57	15·66	31·23	99	6	...	16·79	16·44	33·23	26
12·10	12·22	24·32	99	4	...	12·21	12·20	24·41	27
24·25	23·41	47·66	104	13	...	20·23	19·89	40·12	28
22·03	22·23	44·26	99	6	...	23·07	22·32	45·40	29
20·42	20·25	40·68	101	10	...	22·06	21·59	43·64	30
20·05	19·76	39·81	101	7	...	21·23	20·94	42·17	31
18·02	17·33	35·34	104	10	...	17·00	16·33	33·33	

ANNUAL STATEMENT NO. I (a).—Showing the Still-births registered

No.	Divisions and Districts.	Total number of births registered.	Still-			
			Christians.		Mohamedans.	
			Male.	Female.	Male.	Female.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
ARAKAN DIVISION						
1	Akyab	21,085	...	...	26	25
2	Kyaukpyu	6,669	...	...	2	1
3	Sandoway	3,674	...	...	5	3
PEGU DIVISION.						
4	Rangoon	11,511	14	17	42	33
5	Pegu	16,800	...	...	...	3
6	Tharrawaddy	17,997	2	...	3	2
7	Hanthawaddy	14,192	1	1	3	2
8	Insein	11,445	6	4	5	5
9	Prome	14,202	...	...	4	1
IRRAWADDY DIVISION.						
10	Bassein	20,727	8	4	14	12
11	Henzada	20,454	1	1	1	9
12	Myaungmya	16,742	2	1	4	5
13	Maubin	13,500	...	...	2	...
14	Pyapôn	11,663	24	19	5	2
TENASSERIM DIVISION.						
15	Thatôn	18,818	1	...	7	3
16	Amherst	18,393	3	...	21	17
17	Tavoy	6,580	...	...	1	1
18	Mergui	4,916	...	...	3	3
19	Toungoo	12,961	2	3	7	8
MAGWE DIVISION.						
20	Thayetmyo	10,842	1	...	4	1
21	Minbu	9,317	...	...	2	...
22	Magwe	18,208	3	...	4	4
23	Pakôkku	19,584	...	...	...	...
MANDALAY DIVISION.						
24	Mandalay	14,015	6	5	15	18
25	Kyauksè	4,939	1	...	1	1
26	Meiktila	9,682	...	...	5	...
27	Myingyan	11,494	...	1	1	1
28	Yamèthin	18,625	1	1	10	7
SAGAING DIVISION.						
29	Shwebo	19,773	2	...	1	...
30	Sagaing	13,666	...	...	1	...
31	Lower Chindwin	15,264	...	...	1	1
Total ...		427,738	78	57	200	168

according to Classes and Sex in the districts of Burma during the year 1939.

births.										
Hindus.		Burmese or Buddhists.		Other classes.		Total.		Total.	Percentage (of still- births) to live births.	No
Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.			
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(1)
5	2	38	32	1	1	70	60	130	0·62	1
...	...	35	23	1	...	38	24	62	0·93	2
...	...	3	2	...	...	8	5	13	0·35	3
84	97	169	141	10	5	319	293	612	5·32	4
9	12	35	34	...	1	44	50	94	0·56	5
7	1	77	49	2	2	91	54	145	0·81	6
11	14	58	53	...	3	73	53	126	0·89	7
16	14	73	61	3	2	103	86	189	1·65	8
6	3	41	40	1	...	52	44	96	0·68	9
13	12	165	134	...	1	200	163	363	1·75	10
4	7	111	97	2	5	119	119	238	1·16	11
4	6	47	33	6	2	63	47	110	0·66	12
2	...	56	28	3	1	63	29	92	0·68	13
9	4	93	92	15	11	146	128	274	2·35	14
2	1	28	27	1	...	39	31	70	0·37	15
18	15	96	94	2	...	140	126	266	1·45	16
...	2	6	12	1	1	8	16	24	0·36	17
3	2	24	26	...	1	30	32	62	1·26	18
9	7	52	38	...	1	70	57	127	0·98	19
1	2	54	39	1	...	61	42	103	0·95	20
2	1	32	24	1	...	37	25	62	0·67	21
4	3	64	47	3	...	78	54	132	0·72	22
...	...	81	68	...	...	81	68	149	0·76	23
29	21	189	153	1	1	240	198	438	3·13	24
1	2	93	64	...	...	96	67	163	3·30	25
2	...	10	12	1	...	18	12	30	0·31	26
1	1	46	46	2	...	50	49	99	0·86	27
10	6	92	104	...	...	113	118	231	1·24	28
1	...	40	27	...	1	44	28	72	0·36	29
2	1	52	39	...	...	55	40	95	0·70	30
1	2	25	26	...	...	27	29	56	0·37	31
256	238	1,985	1,645	57	39	2,576	2,147	4,723	1·10	

ANNUAL STATEMENT NO. II.—*Statement of Births and Deaths*

1	2	3	4	5			6		7		
No.	Divisions and Districts.	Area in square miles.	Average population per square mile.	Population (Census 1931).			Births.		Number of deaths registered.		
				Male.	Female.	Total.	Total number.	Birth-rate per 1,000 of population.	Male.	Female.	Total.
	ARAKAN DIVISION.										
1	Akyab ...	4,581	138·73	338,592	296,940	635,532	21,085	33·18	6,859	6,147	13,006
2	Kyaukpyu ...	4,793	45·96	107,729	112,563	220,292	6,669	30·27	1,985	1,845	3,830
3	Sandoway ...	4,149	31·15	64,206	65,039	129,245	3,674	28·43	1,356	1,184	2,540
	PEGU DIVISION.										
4	Rangoon ...	85	4710·76	271,063	129,352	400,415	11,511	28·75	6,675	4,652	11,327
5	Pegu ...	4,114	119·06	253,960	235,851	489,811	16,800	34·30	5,555	4,808	10,363
6	Tharrawaddy ...	2,800	180·65	251,303	254,507	505,810	17,997	35·58	7,022	6,086	13,108
7	Hanthawaddy ...	1,917	213·27	218,919	189,912	408,831	14,192	34·71	4,578	3,883	8,461
8	Insein ...	1,903	174·17	175,519	155,933	331,452	11,445	34·53	4,013	3,499	7,512
9	Prome ...	2,948	139·30	203,171	207,480	410,651	14,202	34·58	6,805	6,241	13,046
	IRRAWADDY DIVISION.										
10	Bassein ...	4,149	137·63	292,029	279,014	571,043	20,727	36·30	6,702	5,981	12,683
11	Henzada ...	2,796	220·24	304,995	310,794	615,789	20,454	33·22	7,673	7,284	14,957
12	Myaungmya ...	2,835	156·89	235,655	209,129	444,784	16,742	37·64	5,078	4,302	9,380
13	Maubin ...	1,642	226·25	188,770	182,739	371,509	13,500	36·34	4,875	4,186	9,061
14	Pyapôn ...	2,145	155·78	179,554	154,604	334,158	11,663	34·90	5,057	4,475	9,532
	TENASSERIM DIVISION.										
15	Thatôn ...	4,872	109·32	274,942	257,686	532,628	18,818	35·33	5,302	4,888	10,190
16	Amherst ...	7,410	69·67	270,677	245,556	516,233	18,393	35·63	5,018	4,298	9,316
17	Tavoy ...	5,404	33·30	92,637	87,327	179,964	6,580	36·56	2,264	1,990	4,254
18	Mergui ...	11,325	14·30	85,263	76,724	161,987	4,916	30·35	1,666	1,577	3,243
19	Toungoo ...	6,457	66·41	220,010	208,818	428,828	12,961	30·22	4,771	40,85	8,856
	MAGWE DIVISION.										
20	Thayetmyo ...	4,626	59·27	135,565	138,612	274,177	10,842	39·54	4,126	4,131	8,257
21	Minbu ...	3,602	77·14	136,662	141,214	277,876	9,317	33·53	3,947	3,873	7,820
22	Magwe ...	3,724	134·15	250,783	248,790	499,573	18,208	36·45	6,542	6,562	13,104
23	Pakôkku ...	5,350	93·30	241,137	258,044	499,181	19,584	39·23	6,998	7,203	14,201
	MANDALAY DIVISION.										
24	Mandalay ...	2,113	175·88	191,741	179,895	371,636	14,015	37·71	5,493	4,877	10,370
25	Kyauksè ...	1,241	121·93	74,880	76,440	151,320	4,930	32·64	2,341	2,210	4,551
26	Meiktila ...	2,232	138·89	147,171	162,828	309,999	9,682	31·23	3,828	3,986	7,814
27	Myingyan ...	2,707	174·57	228,784	243,773	472,557	11,494	24·32	4,871	4,798	9,669
28	Yamèthin ...	4,201	93·03	194,318	196,502	390,820	18,625	47·66	6,844	6,590	13,434
	SAGAING DIVISION.										
29	Shwebo ...	5,735	77·91	214,170	232,620	446,790	19,773	44·26	8,633	8,429	17,062
30	Sagaing ...	1,870	179·66	159,881	176,084	335,965	13,666	40·68	5,071	5,075	10,146
31	Lower Chindwin ...	3,676	104·31	178,543	204,891	383,434	15,264	39·81	6,103	6,420	12,523
	Total ...	117,402	103·08	6,182,629	5,919,661	12,102,290	427,738	35·34	158,051	145,565	303,616

registered in the Districts of Burma during the year 1939.

8	9											10			1
Number of deaths of males to every hundred deaths of females.	Deaths per 1,000 of population from											Mean ratio of deaths per 1,000 during previous five years.			No.
	Cholera.	Sniall-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory diseases.	Injuries.	All other causes.	All caus.e			Male.	Female,	Total.	
									Male.	Female.	Total.				
112	0'09	0'04	...	13'49	1'26	0'73	0'26	4'60	20'26	20'70	20'46	19'44	19'84	19'63	1
108	...	...	...	7'78	0'64	0'29	0'24	8'44	18'43	16'39	17'39	16'67	16'29	16'48	2
115	...	...	...	9'68	0'15	0'29	0'36	9'18	21'12	18'20	19'65	23'03	23'41	23'22	3
143	0'03	0'17	0'01	0'58	1'82	8'19	0'64	16'84	24'63	35'96	28'29	23'37	32'91	26'46	4
116	0'11	...	0'13	5'79	0'30	0'46	0'41	13'97	21'87	20'39	21'16	20'26	17'74	19'04	5
115	0'97	0'01	0'08	10'47	0'42	0'61	0'78	12'57	27'94	23'91	25'91	23'99	20'91	22'44	6
118	0'03	0'01	...	4'58	0'16	0'32	0'41	15'19	20'91	20'45	20'70	21'11	20'85	20'99	7
115	0'02	0'03	0'03	6'68	0'49	0'70	0'59	14'12	22'86	22'44	22'66	21'65	20'29	21'01	8
109	0'18	...	0'15	16'59	0'43	0'94	0'52	12'96	33'49	30'08	31'77	27'95	25'06	26'49	9
112	0'12	0'00	0'09	6'72	0'67	0'74	0'24	13'63	22'95	21'44	22'21	20'52	18'65	19'61	10
105	0'55	0'00	0'00	10'39	0'49	0'37	0'25	12'22	25'16	23'44	24'29	20'12	18'73	19'42	11
118	0'06	0'00	0'02	5'66	0'47	0'49	0'25	13'94	21'55	20'57	21'09	23'53	21'67	22'66	12
116	0'50	0'01	0'04	10'75	0'35	0'47	0'40	11'87	25'83	22'91	24'39	23'49	21'34	22'43	13
113	0'24	0'00	...	7'46	0'90	0'87	0'59	18'47	28'16	28'94	28'53	26'49	26'77	26'62	14
108	0'02	...	0'04	11'19	0'22	0'25	0'23	7'17	19'28	18'97	19'13	17'51	16'73	17'13	15
117	0'01	0'00	...	3'77	0'55	1'13	0'42	12'16	18'54	17'50	18'05	19'93	18'93	19'46	16
114	...	...	...	14'92	0'42	1'10	0'35	6'85	24'44	22'79	23'64	28'19	26'34	27'29	17
106	...	...	...	9'67	0'52	2'32	0'69	6'83	19'54	20'55	20'02	23'89	22'88	23'41	18
117	0'03	...	0'01	8'02	0'44	0'53	0'43	11'19	21'69	19'56	20'65	22'36	20'38	21'39	19
100	0'04	...	0'24	17'32	0'16	0'66	0'36	11'34	30'44	29'80	30'12	23'80	22'32	23'05	20
102	...	...	0'18	15'23	0'22	0'59	0'58	11'34	28'88	27'43	28'14	27'65	25'68	26'64	21
100	0'00	...	0'16	15'00	0'25	0'63	0'56	9'63	26'09	26'38	26'23	21'56	20'73	21'15	22
97	0'01	...	0'28	12'41	0'45	0'73	0'65	13'91	29'02	27'91	28'45	26'39	25'17	25'76	23
113	0'00	...	0'59	7'12	0'89	3'85	0'34	15'12	28'65	27'11	27'90	30'23	28'96	29'61	24
106	...	...	0'22	17'16	1'06	1'04	0'29	10'30	31'26	28'91	30'08	27'88	25'61	26'74	25
96	...	...	2'55	6'69	0'62	0'25	0'64	14'46	26'01	24'48	25'21	22'97	20'29	21'57	26
102	0'00	...	1'43	3'36	0'20	1'01	0'54	13'91	21'29	19'68	20'46	16'98	15'81	16'38	27
104	...	...	0'49	13'36	0'35	0'51	0'45	19'21	35'22	33'54	34'37	27'08	24'96	26'01	28
102	...	...	0'58	19'80	0'41	0'28	0'66	16'49	40'31	36'24	38'19	32'75	29'13	30'86	29
100	0'03	...	1'27	11'84	0'45	0'41	0'71	15'49	31'72	28'82	30'20	29'27	26'16	27'64	30
95	...	...	0'13	14'71	0'52	4'41	0'49	12'40	34'18	31'33	32'66	28'41	25'26	26'73	31
109	0'12	0'01	0'27	9'99	0'53	1'10	0'46	12'61	25'56	24'59	25'09	23'30	22'02	22'68	

SUPPLEMENTARY ANNUAL STATEMENT II (a)—PROVINCIAL—*Showing
(I—XII) for the*

1 Areas.	2 Area in square miles.	3 Average population per square mile.	4 Population according to Census of 1931.		
			Male.	Female.	Total.
Pyinwa Circle of Akyab District	671	3·05	1,051	997	2,048
Arakan Hill Tracts ...	3,228	6·64	11,031	10,387	21,418
* Salween District ...	2,577	20·64	27,990	25,196	53,186
Papun Town ...	...	...	1,236	645	1,881
Chin Hills District ...	10,675	16·04	83,453	87,784	171,237
* Bhamo District ...	4,154	29·18	59,984	61,209	121,193
Bhamo Town ...	...	...	4,846	3,165	8,011
* Myitkyina District ...	30,882	5·55	90,916	80,608	171,524
Myitkyina Town ...	...	...	4,637	2,691	7,328
* Katha District ...	7,593	33·47	126,863	127,307	254,170
Katha Town ...	...	...	2,364	1,869	4,233
* Upper Chindwin District ...	19,001	10·25	99,183	95,659	194,842
Mawlaik Town ...	...	...	1,370	908	2,278
* Northern Shan States ...	24,650	25·81	331,136	304,971	636,107
Lashio Town ...	...	...	2,782	1,856	4,638
* Southern Shan States ...	40,914	22·71	471,234	457,757	928,991
Taunggyi Town ...	...	...	4,671	3,981	8,652
Kalaw Town ...	...	...	2,025	1,596	3,621
Total ...	144,345	17·70	1,302,841	1,251,875	2,554,716

* Includes

*Births and Deaths in Areas not included in the main statements
year 1939.*

5			6	7			8	Remarks.
Number of births registered.			Birth-rate per 1,000 of population.	Number of deaths registered			Death-rate per 1,000 of population.	
Male.	Female.	Total.		Male.	Female.	Total.		
3	2	5	2.44	4	3	7	3.42	
285	242	527	24.61	276	193	469	21.90	
469	473	942	17.71	405	348	753	14.16	
23	25	48	25.52	28	21	49	26.05	
3,511	3,462	6,973	40.72	2,950	2,820	5,770	33.70	
2,028	1,918	3,946	32.56	1,829	1,726	3,555	29.33	
143	134	277	34.58	163	98	261	32.58	
2,867	2,697	5,564	32.44	2,292	2,165	4,457	25.98	
155	141	296	40.39	235	97	332	45.31	
5,167	5,199	10,366	40.78	3,340	3,303	6,643	26.14	
107	99	206	48.67	122	71	193	45.59	
4,647	4,487	9,134	46.88	3,861	3,563	7,424	38.10	
59	69	128	56.19	63	42	105	46.09	
6,734	6,569	13,303	20.91	5,295	4,413	9,708	15.26	
736	130	266	57.35	268	87	355	76.54	
4,921	4,814	9,735	10.48	5,169	4,798	9,967	10.73	
229	206	435	50.28	186	104	290	33.52	
57	66	123	33.97	35	32	67	18.50	
30,632	29,863	60,495	23.68	25,421	23,332	48,753	19.08	

Town.

ANNUAL STATEMENT NO. IIIA.—Deaths registered in the

1	2						
No.	Divisions and Districts.		January.	February.	March.	April.	May.
ARAKAN DIVISION.							
1	Akyab	...	1,134	765	782	801	832
2	Kyaukpyu	...	369	268	235	215	245
3	Sandoway	...	250	135	171	159	155
PEGU DIVISION.							
4	Pegu	...	633	348	579	595	590
5	Tharrawaddy	...	913	680	624	634	567
6	Hanthawaddy	...	513	428	431	659	669
7	Insein	...	466	387	375	428	384
8	Prome	...	1,098	704	858	572	488
IRRAWADDY DIVISION.							
9	Bassein	...	803	620	613	762	650
10	Henzada	...	1,204	894	738	846	918
11	Myaungmya	...	723	456	371	706	477
12	Maubin	...	826	588	377	547	521
13	Pyapôn	...	828	614	730	746	682
TENASSERIM DIVISION.							
14	Thatôn	...	898	519	502	569	652
15	Amherst	...	573	506	491	428	444
16	Tavoy	...	313	236	213	228	214
17	Mergui	...	178	135	263	147	173
18	Toungoo	...	747	498	456	476	447
MAGWE DIVISION.							
19	Thayetmyo	...	689	329	521	395	193
20	Minbu	...	920	501	488	555	357
21	Magwe	...	1,007	806	767	820	660
22	Pakôkku	...	1,275	997	970	980	749
MANDALAY DIVISION.							
23	Mandalay	...	350	272	317	285	263
24	Kyauksè	...	512	256	259	208	263
25	Meiktila	...	1,124	631	364	659	383
26	Myingyan	...	821	714	679	635	431
27	Yamèthin	...	1,173	804	719	835	647
SAGAING DIVISION.							
28	Shwebo	...	1,287	921	951	942	847
29	Sagaing	...	1,147	795	624	638	543
30	Lower Chindwin	...	949	670	775	702	602
Total for Rural Districts			23,723	16,477	16,243	17,173	15,046
Ratio of deaths per 1,000			26·13	20·09	17·89	19·55	16·57

Rural Districts of Burma during each month of the year 1939.

3							4	1
June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
1,028	1,325	1,302	1,057	1,073	938	1,163	12,200	1
281	473	468	418	298	229	256	3,755	2
169	257	294	284	225	161	191	2,451	3
877	831	876	946	954	876	978	9,083	4
785	1,199	991	1,145	1,075	1,016	1,743	11,372	5
779	589	639	629	806	752	801	7,695	6
483	549	534	567	541	544	575	5,833	7
615	836	791	823	1,252	1,316	1,510	10,863	8
879	1,399	1,029	1,040	1,281	860	835	10,771	9
983	1,343	1,255	1,218	1,248	1,189	1,522	13,358	10
494	939	747	766	1,072	832	825	8,408	11
503	769	677	734	832	887	834	8,095	12
735	661	706	698	708	710	832	8,650	13
813	1,370	788	649	1,207	661	777	9,405	14
852	696	600	812	461	523	748	7,134	15
216	300	267	240	318	272	259	3,076	16
214	221	163	186	256	206	198	2,340	17
576	772	828	888	738	706	647	7,779	18
405	534	518	783	559	577	1,966	7,469	19
400	589	592	698	651	627	1,034	7,412	20
818	1,129	1,114	857	907	995	1,571	11,451	21
884	1,237	1,192	1,165	1,391	1,107	1,243	13,190	22
255	262	298	331	422	489	475	4,019	23
196	245	234	212	418	631	824	4,258	24
435	628	546	488	840	634	741	7,473	25
445	596	648	561	753	762	790	7,835	26
798	1,190	1,096	914	948	1,103	1,999	12,227	27
966	1,465	1,536	1,544	1,509	1,962	2,493	16,423	28
610	722	770	746	902	891	1,151	9,539	29
711	1,074	1,224	1,259	1,199	1,253	1,600	12,018	30
18,205	24,200	22,723	22,658	24,844	23,709	30,581	255,582	
20·72	26·66	25·03	25·79	27·36	26·98	33·68	23·91	

ANNUAL STATEMENT NO. IIIB.—Deaths registered in the Towns

1	2					
No.	Divisions and Towns.	January.	February.	March.	April.	May.
ARAKAN DIVISION.						
1	Akyab	74	59	60	57	53
2	Minbya	10	6	7	2	8
3	Kyaukpyu	9	9	11	6	1
4	Sandoway	10	8	6	9	7
PEGU DIVISION.						
5	Rangoon Town	1,053	878	843	826	788
6	Rangoon Cantonment	2	1	1	...	1
7	Pegu	76	56	58	70	65
8	Nyaunglebin	42	35	32	24	22
9	Tharrawaddy	21	13	21	20	20
10	Thônzè	19	9	25	23	14
11	Zigôn	22	35	26	18	17
12	Letpadan	29	39	34	27	27
13	Gyobingauk	23	18	26	14	18
14	Minhla	11	8	9	7	15
15	Nattalin	16	19	14	10	2
16	Syriam	61	37	27	31	35
17	Thôngwa	22	22	17	27	30
18	Insein	74	62	50	55	44
19	Mingaladon Cantonment	4	6	6	4	6
20	Thamaing	23	26	26	22	9
21	Kamayut	24	25	25	14	22
22	Thingangyun	20	23	16	13	10
23	Kanbe	22	16	18	13	10
24	Prome	138	128	130	90	81
25	Shwedaung	52	25	22	21	19
26	Paungdè	46	44	28	23	22
IRRAWADDY DIVISION.						
27	Bassein	125	106	111	111	131
28	Ngathainggyaung	17	11	5	8	10
29	Kyônpyaw	17	17	25	24	20
30	Henzada	91	47	68	56	75
31	Myanaung	28	17	21	18	21
32	Kyangin	22	15	14	9	15
33	Myaungmya	16	19	28	21	24
34	Wakèma	34	28	24	15	17
35	Moulmeingyun	37	33	25	16	24
36	Maubin	42	30	26	28	26
37	Yandoon	31	18	23	20	33
38	Danubyu	26	14	21	12	38
39	Pyapôn	46	34	27	34	36
40	Kyaiklat	46	40	40	54	35
TENASSERIM DIVISION.						
41	Thatôn	51	37	35	43	43
42	Kyaikto	19	21	24	12	9
43	Moulmein	201	164	160	118	149
44	Kawkareik	16	18	10	12	13
45	Tavoy	110	67	100	71	96

of Burma during each month of the year 1939.

3							4	1
June.	July.	August.	September.	October.	November	December.	Total deaths registered during the year.	No.
51	63	76	46	62	59	78	738	1
3	10	3	5	4	7	3	68	2
2	9	9	5	6	6	2	75	3
4	6	9	9	6	9	6	89	4
872	919	952	964	1,009	1,004	1,210	11,318	5
...	1	1	1	1	...	...	9	6
98	122	79	62	80	71	80	917	7
33	25	32	17	37	27	37	363	8
18	27	18	11	14	15	22	220	9
23	34	22	33	22	22	46	292	10
18	26	30	17	19	22	20	270	11
29	33	34	28	29	29	49	387	12
19	25	20	16	21	40	53	293	13
9	7	12	13	10	6	10	117	14
16	13	13	21	10	6	17	157	15
29	45	30	38	40	51	55	479	16
27	22	23	22	18	28	29	287	17
39	56	40	47	52	52	79	650	18
6	2	7	9	7	5	4	66	19
25	32	17	24	29	26	33	292	20
20	35	25	24	21	19	25	279	21
11	22	17	15	16	15	11	189	22
20	14	18	12	13	17	30	203	23
70	98	113	114	110	121	145	1,338	24
12	18	26	36	27	37	99	394	25
34	41	30	46	33	41	63	451	26
111	127	123	130	151	143	163	1,532	27
14	35	11	17	13	20	15	176	28
14	14	16	21	8	13	15	204	29
70	88	131	115	113	117	116	1,087	30
25	28	21	49	28	26	22	304	31
16	19	15	19	19	24	21	208	32
33	17	29	29	25	39	37	317	33
22	28	22	23	24	29	33	299	34
35	26	23	26	32	47	32	356	35
23	27	21	20	25	23	29	320	36
18	19	34	21	48	55	45	365	37
18	23	20	19	31	31	28	281	38
18	31	26	37	35	48	47	419	39
31	25	29	35	28	50	50	463	40
48	58	51	58	42	56	39	561	41
31	16	16	15	20	15	26	224	42
156	151	161	166	169	164	200	1,959	43
10	24	26	30	22	26	16	223	44
109	100	100	89	109	116	111	1,178	45

ANNUAL STATEMENT NO. IIIB.—Deaths registered in the Towns of

1	2							
No.	Divisions and Towns.			January.	February.	March.	April.	May.
TENASSERIM DIVISION—concl'd.								
46	Mergui	...	...	93	86	80	65	51
47	Toungoo	...	...	46	57	34	37	31
48	Shwegyin	...	...	17	26	15	14	16
49	Pyu	...	...	20	15	19	17	15
MAGWE DIVISION.								
50	Thayetmyo	...	...	26	35	14	22	12
51	Allanmyo	...	...	52	73	43	24	22
52	Minbu	...	...	23	17	15	10	9
53	Salin	...	...	31	19	18	16	13
54	Magwe	...	...	23	26	28	37	23
55	Taungdwingyi	...	...	46	35	48	42	30
56	Yenangyaung	...	...	39	39	47	33	35
57	Chauk	...	...	34	26	31	17	30
58	Pakôkku	...	...	71	98	76	80	55
MANDALAY DIVISION.								
59	Mandalay	...	...	525	460	427	367	341
60	Mandalay Cantonment	...	...	56	29	31	21	19
61	Maymyo	...	...	43	34	37	30	31
62	Maymyo Cantonment	...	...	6	4	9	3	1
63	Myitngè	...	...	9	4	9	10	6
64	Kyauksè	...	...	22	18	28	19	21
65	Meiktila	...	...	19	26	27	23	22
66	Myingyan	...	...	220	301	170	76	70
67	Nyaung-u	...	...	21	26	39	22	18
68	Yamèthin	...	...	25	21	28	28	22
69	Pyinmana	...	...	91	59	62	45	40
70	Pyawbwè	...	...	61	14	16	23	13
SAGAING DIVISION.								
71	Shwebo	...	...	44	31	26	33	24
72	Ye-u	...	...	2	9	4	7	7
73	Sagaing	...	...	47	34	35	21	24
74	Myinmu	...	...	14	15	14	13	10
75	Mônywa	...	...	46	64	40	35	27
Total for Towns				4,650	4,044	3,795	3,298	3,199
Ratio per mille for Towns				38·76	40·88	31·63	28·41	26·66
Total for Burma				28,373	20,521	20,038	20,471	18,245
* Ratio per mille for Burma				27·60	22·10	19·49	20·58	17·75
TOWNS FOR WHICH CORRESPONDING RURAL FIGURES ARE NOT GIVEN IN VIA.								
1	Bhamo	...	...	20	15	15	24	12
2	Myitkyina	...	...	30	29	16	33	22
3	Mawlaik	...	...	8	4	8	5	10
4	Lashio	...	...	15	9	23	29	20
5	Taunggyi	...	...	25	19	18	21	17
6	Kalaw	...	...	1	4	1	1	10

* The ratios should be calculated with

Burma during each month of the year 1939—concl'd.

3							4	1
June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.	No.
70	67	63	74	89	83	82	903	46
64	65	51	64	50	51	57	607	47
11	18	22	11	13	12	21	196	48
31	29	23	28	25	23	29	274	49
21	23	31	26	30	34	40	314	50
33	29	41	29	27	33	68	474	51
8	25	12	17	16	15	23	190	52
15	19	10	16	12	16	33	218	53
21	16	28	17	29	40	45	333	54
52	43	48	46	34	37	49	510	55
30	38	40	39	35	43	56	474	56
17	19	26	44	34	29	29	336	57
57	95	91	89	92	87	120	1,011	58
318	404	377	440	512	555	564	5,290	59
24	24	29	25	28	41	38	365	60
43	61	49	34	48	47	67	524	61
4	13	9	4	10	6	6	75	62
9	9	5	8	11	11	6	97	63
20	20	19	28	23	36	39	293	64
18	21	29	24	44	46	42	341	65
81	110	116	84	103	100	117	1,548	66
18	20	19	29	21	20	33	286	67
20	19	18	19	20	23	41	284	68
36	69	56	53	59	51	56	677	69
16	25	17	14	14	11	22	246	70
36	38	56	52	70	62	54	526	71
12	13	5	9	24	10	11	113	72
34	23	40	43	38	48	48	435	73
13	15	19	17	21	14	7	172	74
38	36	46	43	49	48	33	505	75
3,460	3,967	3,926	3,980	4,219	4,409	5,087	48,034	
29.80	33.07	32.72	34.28	35.17	37.97	42.40	34.00	
21,665	28,167	26,649	26,638	29,063	28,118	35,668	303,616	
21.78	27.40	25.93	26.78	28.28	28.27	34.70	25.09	
22	23	34	24	25	22	25	261	1
20	27	34	37	23	23	38	332	2
7	9	5	5	18	14	12	105	3
34	24	37	36	32	32	64	355	4
14	18	15	29	50	32	32	290	5
2	11	9	6	13	7	2	67	6

reference to the number of days in each month.

ANNUAL STATEMENT NO. IV.—Deaths registered according to Age

1	2	3		4		5		6		7	
No.	Divisions and Districts.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.	
		Males.	Females	Males.	Females	Males.	Females	Males.	Females	Males.	Females.
	ARAKAN DIVISION.										
1	Akyab ...	1,594	1,433	1,104	1,069	536	493	216	183	236	227
2	Kyaukpyu ...	627	488	234	203	140	109	47	64	47	62
3	Sandoway ...	535	409	116	103	56	62	30	29	37	39
	PEGU DIVISION.										
4	Rangoon ...	1,738	1,376	510	547	141	131	73	75	151	155
5	Pegu ...	1,861	1,605	549	503	165	161	125	96	172	147
6	Tharrawaddy ...	2,384	1,923	652	671	282	284	191	195	268	216
7	Hanthawaddy ...	1,329	1,037	454	435	162	150	66	72	114	117
8	Insein ...	1,132	946	425	514	129	145	86	54	125	109
9	Prome ...	1,800	1,556	470	535	313	360	305	294	414	340
	IRRAWADDY DIVISION.										
10	Bassein ...	2,069	1,772	679	703	270	284	141	158	232	172
11	Henzada ...	2,168	1,856	870	915	377	363	206	153	268	211
12	Myaungmya ...	1,802	1,484	441	435	161	164	118	86	144	138
13	Maubin ...	1,746	1,302	521	497	171	160	93	79	162	132
14	Pyapôn ...	1,256	1,007	378	400	190	174	67	69	137	119
	TENASSERIM DIVISION.										
15	Thatôn ...	1,292	1,112	838	854	228	218	129	107	143	142
16	Amherst ...	1,222	966	664	637	241	256	129	122	157	154
17	Tavoy ...	456	373	260	286	121	152	66	53	122	76
18	Mergui ...	370	356	205	197	133	130	84	77	92	77
19	Toungoo ...	1,597	1,367	433	471	201	191	113	98	146	121
	MAGWE DIVISION.										
20	Thayetmyo ...	1,168	1,100	457	486	244	287	174	167	145	145
21	Minbu ...	1,202	1,047	462	466	175	227	95	113	140	128
22	Magwe ...	1,988	1,808	819	862	249	314	167	161	229	213
23	Pakôkku ...	2,024	1,752	1,182	1,166	319	349	184	186	224	236
	MANDALAY DIVISION.										
24	Mandalay ...	1,621	1,397	462	460	181	184	173	143	232	188
25	Kyauksè ...	761	652	156	190	129	114	103	79	118	109
26	Meiktila ...	1,000	938	412	470	182	226	120	119	193	139
27	Myingyan ...	1,099	938	587	575	253	258	203	223	220	208
28	Yamèthin ...	2,443	2,206	834	873	364	387	221	211	226	220
	SAGAING DIVISION.										
29	Shwebo ...	3,227	2,837	928	1,005	352	436	248	225	332	290
30	Sagaing ...	1,656	1,465	565	598	173	191	132	119	179	162
31	Lower Chindwin ...	1,854	1,665	821	800	354	379	161	184	214	214
	Total, Deaths ...	47,021	40,173	17,488	17,926	6,992	7,339	4,266	3,994	5,619	5,006
	Total, Population	156,129	165,140	655,253	680,262	754,499	742,497	705,048	679,505	574,397	593,405
	Total, Ratio per 1,000 living.	301·17	243·27	26·69	26·35	9·27	9·88	6·05	5·88	9·78	8·44

and Sexes in the Districts of Burma during the year 1939.

8		9		10		11		12		13		1
20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		Total (all ages)		No.
Males	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
485	683	597	514	540	331	531	383	1,020	831	6,859	6,147	1
93	140	115	129	147	98	131	120	404	432	1,985	1,845	2
60	102	75	70	97	77	99	93	251	200	1,356	1,184	3
727	508	936	436	839	344	631	292	929	788	6,675	4,652	4
395	437	489	444	461	330	436	295	902	790	5,555	4,808	5
525	505	663	512	537	373	509	435	1,011	972	7,022	6,086	6
278	362	366	372	389	284	385	273	1,035	781	4,578	3,883	7
320	302	426	313	348	231	332	257	690	628	4,013	3,499	8
729	638	751	669	654	538	537	509	832	802	6,805	6,241	9
449	518	584	525	593	457	514	463	1,171	929	6,702	5,981	10
538	561	613	697	683	550	594	595	1,356	1,383	7,673	7,284	11
377	379	409	416	438	280	370	248	818	672	5,078	4,302	12
339	377	311	389	381	297	309	250	842	703	4,875	4,186	13
304	347	437	477	719	614	724	613	845	655	5,057	4,475	14
346	395	453	506	416	368	463	359	994	827	5,302	4,888	15
430	408	412	397	402	322	324	234	1,037	802	5,018	4,298	16
236	219	258	213	206	158	195	152	344	308	2,264	1,990	17
125	162	158	154	170	116	124	105	205	203	1,666	1,577	18
391	371	434	412	382	246	337	266	737	542	4,771	4,085	19
281	346	325	336	314	293	300	279	718	692	4,126	4,131	20
262	364	345	368	317	278	303	264	646	618	3,947	3,873	21
487	581	534	579	467	417	395	347	1,207	1,280	6,542	6,562	22
449	562	494	588	421	452	431	434	1,270	1,478	6,998	7,203	23
519	399	564	441	500	411	504	384	737	870	5,493	4,877	24
159	141	175	191	214	195	198	196	328	343	2,341	2,210	25
307	350	354	348	293	269	232	198	735	929	3,828	3,986	26
401	393	409	410	368	311	382	320	949	1,162	4,871	4,798	27
474	512	496	498	454	328	387	315	945	1,040	6,844	6,590	28
618	680	619	532	519	481	417	447	1,373	1,496	8,633	8,429	29
380	431	398	392	375	368	315	278	898	1,071	5,071	5,075	30
396	464	436	507	393	398	364	386	1,110	1,423	6,103	6,420	31
11,880	12,637	13,636	12,835	13,037	10,215	11,773	9,790	26,339	25,650	158,051	145,565	
1,138,501	1,089,344	904,240	760,641	593,857	528,782	387,136	372,161	313,569	307,924	6,182,629	5,919,661	
10'43	11'60	15'08	16'87	21'95	19'32	30'41	26'31	84'00	83'30	25'56	24'59	

SUPPLEMENTARY ANNUAL STATEMENT NO. IV *giving the details of Deaths by*

No.	Divisions and Districts.	Not exceeding one month.						
		Male.			Female.			Total of columns 5 and 8.
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	ARAKAN DIVISION.							
1	Akyab	150	135	285	117	114	231	516
2	Kyaukpyu	59	43	102	29	42	71	173
3	Sandoway	39	30	69	31	29	60	129
	PEGU DIVISION.							
4	Rangoon	355	212	567	229	150	379	946
5	Pegu	220	177	397	156	156	312	709
6	Tharrawaddy	230	192	422	179	173	352	774
7	Hanthawaddy	151	111	262	108	71	179	441
8	Insein	151	148	299	115	124	239	538
9	Prome	118	98	216	98	75	173	389
	IRRAWADDY DIVISION.							
10	Bassein	278	218	496	218	172	390	886
11	Henzada	263	212	475	207	181	388	863
12	Myaungmya	243	206	449	178	120	298	747
13	Maubin	210	199	409	138	129	267	676
14	Pyapôn	170	115	285	131	74	205	490
	TENASSERIM DIVISION.							
15	Thatôn	136	130	266	102	102	204	470
16	Amherst	158	134	292	144	118	262	554
17	Tavoy	59	65	124	44	41	85	209
18	Mergui	57	75	132	61	63	124	256
19	Toungoo	107	174	281	83	129	212	493
	MAGWE DIVISION.							
20	Thayetmyo	92	85	177	68	83	151	328
21	Minbu	124	120	244	92	121	213	457
22	Magwe	320	201	521	265	178	443	964
23	Pakôkku	344	277	621	270	236	506	1,127
	MANDALAY DIVISION.							
24	Mandalay	386	177	563	331	158	489	1,052
25	Kyauksè	160	163	323	120	138	258	581
26	Meiktila	88	80	168	70	76	146	314
27	Myingyan	170	157	327	120	104	224	551
28	Yamèthin	232	171	403	187	164	351	754
	SAGAING DIVISION.							
29	Shwebo	378	429	807	306	357	663	1,470
30	Sagaing	252	206	458	170	156	326	784
31	Lower Chindwin	317	172	489	286	169	455	944
	Total	6,017	4,912	10,929	4,653	4,003	8,656	19,585
	Ratio per mille of births for last 3 columns only.	...	...	...	...	...	...	...

Ages and Sexes under one year in the Districts of Burma during the year 1939.

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total male, columns 5, 10 and 13.	Total female, columns 8, 11 and 14.	Total.	No.
Male.	Female.	Total.	Male.	Female.	Total.				
(10)	(11)	(12)	(13)	(14)	(15)				(1)
950	852	1,802	359	350	709	1,594	1,433	3,027	1
403	317	720	122	100	222	627	488	1,115	2
403	310	713	63	39	102	535	409	944	3
935	764	1,699	236	233	469	1,738	1,376	3,114	4
1,210	1,085	2,295	254	208	462	1,861	1,605	3,466	5
1,599	1,262	2,861	363	309	672	2,384	1,923	4,307	6
896	697	1,593	171	161	332	1,329	1,037	2,366	7
678	544	1,222	155	163	318	1,132	946	2,078	8
1,323	1,114	2,437	261	269	530	1,800	1,556	3,356	9
1,221	1,096	2,317	352	286	638	2,069	1,772	3,841	10
1,391	1,169	2,560	302	299	601	2,168	1,856	4,024	11
1,202	989	2,191	151	197	348	1,802	1,484	3,286	12
1,076	837	1,913	261	198	459	1,746	1,302	3,048	13
829	687	1,516	142	115	257	1,256	1,007	2,263	14
826	710	1,536	200	198	398	1,292	1,112	2,404	15
688	542	1,230	242	162	404	1,222	966	2,188	16
269	227	496	63	61	124	456	373	829	17
160	157	317	78	75	153	370	356	726	18
1,071	924	1,995	245	231	476	1,597	1,367	2,964	19
783	738	1,521	208	211	419	1,168	1,100	2,268	20
764	589	1,353	194	245	439	1,202	1,047	2,249	21
1,131	1,092	2,223	336	273	609	1,988	1,808	3,796	22
1,020	849	1,869	383	397	780	2,024	1,752	3,776	23
796	651	1,447	262	257	519	1,621	1,397	3,018	24
259	237	496	179	157	336	761	652	1,413	25
645	611	1,256	187	181	368	1,000	938	1,938	26
541	491	1,032	231	223	454	1,099	938	2,037	27
1,701	1,513	3,214	339	342	681	2,443	2,206	4,649	28
1,857	1,623	3,480	563	551	1,114	3,227	2,837	6,064	29
905	832	1,737	293	307	600	1,656	1,465	3,121	30
1,066	912	1,978	299	298	597	1,854	1,665	3,519	31
28,598	24,421	53,019	7,494	7,096	14,590	47,021	40,173	87,194	
...	...	...	...	...	...	215.66	191.57	203.85	

ANNUAL STATEMENT NO. IV-A.—Deaths registered according to Ages and Sexes in

1	2	3		4		5		6		7	
No.	Divisions and Towns.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.	
		Males.	Females	Males.	Females	Males.	Females	Males	Females	Males.	Females
	ARAKAN DIVISION.										
1	Akyab ...	90	78	21	18	8	7	6	5	17	13
	PEGU DIVISION.										
2	Rangoon ...	1,734	1,374	510	546	141	131	73	75	151	154
3	Rangoon Cantonment	4	2	...	1	...	...	...	...	...	1
4	Pegu ...	124	101	41	29	16	10	7	9	15	11
5	Letpadan ...	50	49	7	11	8	5	6	3	6	5
6	Syriam ...	47	52	16	14	5	3	6	2	7	9
7	Insein ...	80	59	37	42	4	7	5	1	11	10
8	Prome ...	181	171	45	53	24	27	28	19	46	24
9	Paungdè ...	44	29	9	15	4	6	3	8	9	5
	IRRAWADDY DIVISION.										
10	Bassein ...	248	209	62	55	23	18	12	8	22	19
11	Henzada ...	147	134	60	55	24	20	19	7	14	16
12	Pyapôn	62	46	9	15	7	8	4	3	9	4
13	Kyaiklat ...	74	62	29	23	6	6	4	5	7	3
	TENASSERIM DIVISION.										
14	Thatôn ...	71	58	28	36	12	6	9	3	6	15
15	Moulmein ...	259	201	88	80	29	28	16	17	26	31
16	Tavoy ...	116	115	50	56	23	24	17	7	52	21
17	Mergui ...	121	123	50	43	50	43	41	39	48	40
18	Toungoo ...	38	42	31	37	12	13	7	7	13	4
	MAGWE DIVISION.										
19	Allanmyo ...	59	60	23	18	7	19	13	4	12	4
20	Yenangyaung ...	92	63	18	23	4	7	5	5	8	9
21	Chauk ...	66	65	17	16	5	5	5	2	5	5
22	Pakôkku ...	204	179	63	45	18	15	14	4	13	17
	MANDALAY DIVISION.										
23	Mandalay ...	891	758	212	215	65	70	65	54	104	70
24	Mandalay Cantmt.	72	46	9	6	5	4	6	3	4	5
25	Maymyo ...	85	68	28	32	3	7	5	4	9	6
26	Maymyo Cantmt.	27	15	3	5	...	1	...	...	1	2
27	Myingyan ...	233	212	73	65	39	47	35	34	35	21
28	Pyinmana ...	108	88	28	27	15	10	12	4	13	8
	SAGAING DIVISION.										
29	Shwebo ...	94	62	41	42	7	6	10	7	15	13
30	Sagaing ...	80	59	12	13	7	11	7	4	12	8
31	Mônywa ...	86	74	22	17	16	16	11	9	11	10
	Total of Towns, Burma.	5,587	4,664	1,642	1,653	587	580	451	352	701	563
	Total, Population ...	10,332	10,564	40,261	40,785	51,779	48,179	54,045	46,734	72,223	46,696
	Total, Ratio per 1,000 living.	540.75	441.50	40.78	40.53	11.34	12.04	8.34	7.53	9.71	12.06

the Towns of Burma having a population of 10,000 and above during the year 1939.

8		9		10		11		12		13		1
20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		Total (all ages).		No.
Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	
46	36	70	34	69	14	55	21	71	59	453	285	1
727	508	936	436	839	344	631	292	929	787	6,671	4,647	2
...	...	...	...	...	...	...	...	...	1	4	5	3
46	47	70	43	69	27	54	44	83	71	525	392	4
13	15	32	20	32	11	20	17	42	35	216	171	5
31	28	44	23	43	12	39	9	58	31	296	183	6
73	26	70	25	40	16	31	21	48	44	399	251	7
105	64	102	51	84	43	75	40	78	78	768	570	8
31	29	41	28	32	13	32	23	60	30	265	186	9
91	59	136	64	119	45	100	48	123	71	936	596	10
50	46	68	39	73	31	52	40	90	102	597	490	11
21	13	37	16	37	11	24	8	56	29	266	153	12
23	18	31	26	26	13	22	16	40	29	262	201	13
33	26	28	24	32	14	37	20	59	44	315	246	14
142	81	137	81	119	79	107	51	219	168	1,142	817	15
113	58	115	48	78	41	64	37	77	66	705	473	16
31	42	36	41	39	25	30	15	28	18	474	429	17
46	27	58	32	66	19	41	15	62	37	374	233	18
18	27	32	27	22	13	24	14	35	43	245	229	19
34	19	36	18	27	14	18	7	30	37	272	202	20
14	9	27	15	15	7	10	12	21	15	185	151	21
28	33	36	47	33	33	21	25	70	113	500	511	22
273	196	302	210	238	204	276	172	403	512	2,829	2,461	23
22	15	21	1	23	8	18	13	29	45	209	156	24
41	20	52	27	32	10	18	11	31	35	304	220	25
6	1	...	...	5	...	3	2	...	4	45	30	26
92	79	90	77	75	57	58	46	90	90	820	728	27
50	34	35	27	38	18	36	22	58	46	393	284	28
23	19	34	23	23	15	19	25	32	16	298	228	29
16	15	21	21	23	12	25	12	37	40	240	195	30
15	15	25	23	22	10	16	20	40	47	264	241	31
2,254	1,605	2,722	1,547	2,373	1,159	1,956	1,098	2,999	2,743	21,272	15,964	
179,693	89,590	136,649	63,527	73,440	41,275	34,964	26,482	21,177	21,581	674,563	435,413	
12.54	17.91	19.92	24.35	32.31	28.08	55.94	41.46	141.62	127.10	31.53	36.66	

SUPPLEMENTARY ANNUAL STATEMENT NO. IV-A *giving the Details of
of 10,000 and above*

No.	Divisions and Towns.	Not exceeding one month.						Total of columns 5 and 8.
		Male.			Female.			
		Under one week.	Over one week.	Total.	Under one week.	Over one week.	Total.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	ARAKAN DIVISION.							
1	Akyab	29	8	37	15	10	25	62
	PEGU DIVISION.							
2	Rangoon	354	211	565	229	150	379	944
3	Rangoon Cantonment	1	1	2	...	...	...	2
4	Pegu	26	10	36	17	10	27	63
5	Letpadan	11	3	14	14	3	17	31
6	Syriam	11	5	16	7	4	11	27
7	Insein	11	9	20	13	6	19	39
8	Prome	40	10	50	37	10	47	97
9	Paungdè	7	4	11	5	1	6	17
	IRRAWADDY DIVISION.							
10	Bassein	50	27	77	43	14	57	134
11	Henzada	27	11	38	22	7	29	67
12	Pyapôn	10	8	18	7	4	11	29
13	Kyaiklat	11	5	16	9	5	14	30
	TENASSERIM DIVISION.							
14	Thatôn	21	4	25	22	2	24	49
15	Moulmein	59	19	78	42	17	59	137
16	Tavoy	6	20	26	14	14	28	54
17	Mergui	34	28	62	29	27	56	118
18	Toungoo	8	...	8	9	2	11	19
	MAGWE DIVISION.							
19	Allanmyo	10	5	15	8	4	12	27
20	Yenangyaung	15	6	21	5	3	8	29
21	Chauk	10	4	14	2	3	5	19
22	Pakôkku	21	8	29	24	8	32	61
	MANDALAY DIVISION.							
23	Mandalay	242	91	333	210	73	283	616
24	Mandalay Cantonment	21	6	27	18	3	21	48
25	Maymyo	21	5	26	17	5	22	48
26	Maymyo Cantonment	4	7	11	4	2	6	17
27	Myingyan	49	19	68	34	12	46	114
28	Pyinmana	10	6	16	16	2	18	34
	SAGAING DIVISION.							
29	Shwebo	22	10	32	12	4	16	48
30	Sagaing	11	8	19	3	10	13	32
31	Mônywa	29	6	35	17	3	20	55
	Total of Towns, Burma ...	1,181	564	1,745	904	418	1,322	3,067
	Ratio per mille of births for last 3 columns only.	...	...	...	...	...	...	...

Deaths by Ages and Sexes under One year in the Towns having a population during the year 1939.

Over one month and not exceeding six months.			Over six months and not exceeding twelve months.			Total Male, columns 5, 10 and 13.	Total Female, columns 8, 11 and 14.	Total.	No
Male.	Female.	Total.	Male.	Female.	Total.				
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(1)
40	39	79	13	14	27	90	78	168	1
933	762	1,695	236	233	469	1,734	1,374	3,108	2
2	2	4	..	...	...	4	2	6	3
60	57	117	28	17	45	124	101	225	4
31	24	55	5	8	13	50	49	99	5
21	30	51	10	11	21	47	52	99	6
47	31	78	13	9	22	80	59	139	7
114	101	215	17	23	40	181	171	352	8
24	18	42	9	5	14	44	29	73	9
146	132	278	25	20	45	248	209	457	10
91	79	170	18	26	44	147	134	281	11
40	30	70	4	5	9	62	46	108	12
51	39	90	7	9	16	74	62	136	13
34	22	56	12	12	24	71	58	129	14
139	114	253	42	28	70	259	201	460	15
71	61	132	19	26	45	116	115	231	16
34	42	76	25	25	50	121	123	244	17
20	22	42	10	9	19	38	42	80	18
32	40	72	12	8	20	59	60	119	19
56	48	104	15	7	22	92	63	155	20
49	53	102	3	7	10	66	65	131	21
136	117	253	39	30	69	204	179	383	22
445	352	797	113	123	236	891	758	1,649	23
34	28	62	11	7	18	72	56	128	24
48	36	84	11	10	21	85	68	153	25
10	5	15	6	4	10	27	15	42	26
128	124	252	37	42	79	233	212	445	27
77	58	135	15	12	27	108	88	196	28
55	40	95	7	6	13	94	62	156	29
53	37	90	8	9	17	80	59	139	30
43	47	90	8	7	15	86	74	160	31
3,064	2,590	5,654	778	752	1,530	5,587	4,664	10,251	
...	...	...	...	...	...	274'06	247'31	261'21	

ANNUAL STATEMENT NO. V.—Deaths registered according

1	2	3					
No.	Divisions and Districts.	Population (Census 1931).					
		Christians.	Mahome- dans.	Hindus.	Burmese or Buddhists.	Other classes.	Total.
ARAKAN DIVISION.							
1	Akyab ...	398	242,381	16,685	337,661	38,407	635,532
2	Kyaukpyu ...	212	6,694	768	195,152	17,466	220,292
3	Sandoway ...	1,258	6,286	696	118,322	2,683	129,245
PEGU DIVISION.							
4	Rangoon ...	30,888	70,791	140,901	135,466	22,369	400,415
5	Pegu ...	11,387	11,021	41,057	419,365	6,981	489,811
6	Tharrawaddy ...	7,140	5,511	9,068	481,051	3,040	505,810
7	Hanthawaddy ...	6,450	13,535	52,247	331,684	4,915	408,831
8	Insein ...	20,409	10,249	31,283	262,677	6,834	331,452
9	Prome ...	1,486	4,958	7,871	389,593	6,743	410,651
IRRAWADDY DIVISION.							
10	Bassein ...	39,738	11,393	15,647	499,482	4,783	571,043
11	Henzada ...	15,525	5,826	7,279	584,495	2,664	615,789
12	Myaungmya ...	24,091	15,150	13,083	386,071	6,389	444,784
13	Maubin ...	14,252	6,266	8,537	339,971	2,483	371,509
14	Pyapôn ...	12,085	7,162	22,560	287,659	4,692	334,158
TENASSERIM DIVISION.							
15	Thatôn ...	5,663	16,047	22,612	483,981	4,325	532,628
16	Amherst ...	9,385	31,865	24,645	438,021	12,317	516,233
17	Tavoy ...	4,487	3,051	3,733	164,579	4,114	179,964
18	Mergui ...	9,461	14,551	7,700	123,865	6,410	161,987
19	Toungoo ...	42,294	9,661	23,775	340,955	12,143	428,828
MAGWE DIVISION.							
20	Thayetmyo ...	511	1,995	2,276	253,442	15,953	274,177
21	Minbu ...	152	1,446	2,016	269,194	5,068	277,876
22	Magwe ...	2,388	5,286	10,314	478,521	3,064	499,573
23	Pakôkku ...	328	1,166	1,358	492,318	4,011	499,181
MANDALAY DIVISION.							
24	Mandalay...	9,684	24,456	28,386	304,476	4,634	371,636
25	Kyauksè ...	628	7,300	1,419	141,513	460	151,320
26	Meiktila ..	501	4,931	3,381	300,745	441	309,999
27	Myingyan ...	384	1,345	2,284	468,070	474	472,557
28	Yamèthin ...	2,514	15,343	7,323	360,353	5,287	390,820
SAGAING DIVISION.							
29	Shwebo ...	2,504	9,112	3,463	430,672	1,039	446,790
30	Sagaing ...	869	3,044	2,690	329,040	322	335,965
31	Lower Chindwin ...	308	1,156	1,338	380,084	548	383,434
Total ...		277,380	568,978	516,395	10,528,478	211,059	12,102,290

to classes in the Districts of Burma during the year 1939.

4						5						1
Number of deaths registered.						Ratio of deaths per 1,000 of population.						No.
Chris- tians.	Maho- medans.	Hindus.	Burmese or Buddhists	Other classes.	Total.	Chris- tians.	Maho- medans.	Hindus.	Burmese or Buddhists	Other classes.	Total.	
1	4,739	150	7,465	651	13,006	2·51	19·55	8·99	22·11	16·95	20·46	1
5	134	3	3,440	248	3,830	23·58	20·02	3·91	17·63	14·20	17·39	2
31	116	5	2,349	39	2,540	24·64	18·45	7·18	19·85	14·54	19·65	3
768	1,360	3,324	5,645	230	11,327	24·86	19·21	23·59	41·67	10·28	28·29	4
236	212	534	9,073	308	10,363	20·73	19·24	13·01	21·64	44·12	21·16	5
140	136	209	12,530	93	13,108	19·61	24·68	23·05	26·05	30·59	25·91	6
87	203	567	7,302	302	8,461	13·49	15·00	10·85	20·01	61·44	20·70	7
393	230	680	6,009	200	7,512	19·26	22·44	21·74	22·88	29·27	22·66	8
19	122	259	12,591	55	13,046	12·79	24·61	32·91	32·32	8·16	31·77	9
742	254	378	11,203	106	12,683	18·67	22·29	24·16	22·43	22·16	22·21	10
155	115	151	14,461	75	14,957	9·98	19·74	20·74	24·74	28·15	24·29	11
610	185	195	8,160	230	9,380	25·32	12·21	14·90	21·14	36·00	21·09	12
174	142	114	8,523	108	9,061	12·21	22·66	13·35	25·07	43·50	24·39	13
261	114	312	8,527	318	9,532	21·60	15·92	13·83	29·64	67·77	28·53	14
52	205	280	9,280	373	10,190	9·18	12·77	12·38	19·17	86·24	19·13	15
123	719	543	7,718	213	9,316	13·11	22·56	22·03	17·62	17·29	18·05	16
72	92	188	3,734	168	4,254	16·05	30·15	50·36	22·69	40·84	23·64	17
132	316	147	2,298	350	3,243	13·95	21·72	19·09	18·55	54·60	20·02	18
663	212	357	7,264	360	8,856	15·68	21·94	15·02	21·30	29·65	20·65	19
16	48	27	8,096	70	8,257	31·31	24·06	11·86	31·94	4·39	30·12	20
...	16	29	7,675	100	7,820	...	11·07	14·38	28·51	19·73	28·14	21
10	66	112	12,898	18	13,104	4·19	12·49	10·86	26·95	5·87	26·23	22
...	7	11	14,076	107	14,201	...	6·00	8·10	28·59	26·68	28·45	23
156	591	653	8,846	124	10,370	16·11	24·17	23·00	29·05	26·76	27·90	24
1	229	73	4,248	...	4,551	1·59	31·37	51·44	30·02	...	30·08	25
9	134	38	7,618	15	7,814	17·96	27·18	11·24	25·33	34·01	25·21	26
4	61	37	9,540	27	9,669	10·42	45·35	16·20	20·38	56·96	20·46	27
68	488	167	12,623	88	13,434	27·05	31·81	22·80	35·03	16·64	34·37	28
30	215	52	16,700	65	17,062	11·98	23·60	15·02	38·78	62·56	38·19	29
1	79	29	10,030	7	10,146	1·15	25·95	10·78	30·48	21·74	30·20	30
4	15	11	12,488	5	12,523	12·99	12·98	8·22	32·86	9·12	32·66	31
4,963	11,555	9,635	272,410	5,053	303,616	17·89	20·31	18·66	25·87	23·94	25·09	

SUPPLEMENTARY ANNUAL STATEMENT NO. V-A.—Deaths registered according to

1	2	3							
No.	Divisions and Districts.	Population (Census 1931).							
		Christians.		Mahomedans.		Hindus.		Burmese or Buddhists.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
	ARAKAN DIVISION.								
1	Akyab ...	255	143	132,976	109,405	15,044	1,641	170,099	167,562
2	Kyaukpyu ...	104	108	3,736	2,958	716	52	94,038	101,114
3	Sandoway ...	664	594	3,476	2,810	606	90	58,022	60,300
	PEGU DIVISION.								
4	Rangoon ...	17,094	13,794	56,147	14,644	112,735	28,166	69,936	65,530
5	Pegu ...	5,702	5,685	7,912	3,109	27,279	13,778	208,666	210,699
6	Tharrawaddy ...	4,512	2,628	3,897	1,614	6,995	2,073	233,967	247,084
7	Hanthawaddy ...	3,696	2,754	9,570	3,965	35,741	16,506	166,559	165,125
8	Insein ...	10,559	9,850	6,969	3,280	22,244	9,039	131,650	131,027
9	Prome ...	832	654	3,345	1,613	5,955	1,916	189,346	200,247
	IRRAWADDY DIVISION.								
10	Bassein ...	19,647	20,091	8,228	3,165	13,366	2,281	247,527	251,955
11	Henzada ...	7,654	7,871	3,764	2,062	5,889	1,390	285,957	298,538
12	Myaungmya ...	12,302	11,789	12,071	3,079	11,534	1,549	195,197	190,874
13	Maubin ...	6,905	7,347	4,683	1,583	7,334	1,203	168,194	171,777
14	Pyapôn ...	6,346	5,739	6,182	980	16,987	5,573	146,589	141,070
	TENASSERIM DIVISION.								
15	Thatôn ...	2,840	2,823	10,386	5,661	14,853	7,759	244,310	239,671
16	Amherst ...	4,648	4,737	18,912	12,953	17,758	6,887	222,552	215,469
17	Tavoy ...	2,310	2,177	1,934	1,117	3,190	543	82,292	82,287
18	Mergui ...	4,964	4,497	7,849	6,702	5,709	1,991	62,713	61,152
19	Toungoo ...	21,371	20,923	6,473	3,188	15,328	8,447	170,327	170,628
	MAGWE DIVISION.								
20	Thayetmyo ...	287	224	1,256	739	1,727	549	124,297	129,145
21	Minbu ...	85	67	1,021	425	1,707	309	131,149	138,045
22	Magwe ...	1,581	807	4,153	1,133	8,928	1,386	234,162	244,359
23	Pakôkku ...	220	108	900	266	1,161	197	236,756	255,562
	MANDALAY DIVISION.								
24	Mandalay ...	5,508	4,176	14,053	10,403	19,224	9,162	149,491	154,985
25	Kyauksè ...	306	322	3,712	3,588	1,154	265	69,383	72,130
26	Meiktila ...	274	227	2,609	2,322	2,509	872	141,447	159,298
27	Myingyan ...	221	163	914	431	1,778	506	225,525	242,545
28	Yamèthin ...	1,390	1,124	8,126	7,217	5,130	2,193	176,535	183,818
	SAGAING DIVISION.								
29	Shwebo ...	1,339	1,165	4,775	4,337	2,671	792	204,650	226,022
30	Sagaing ...	408	461	1,704	1,340	1,888	802	155,655	173,385
31	Lower Chindwin ...	187	121	833	323	994	344	176,154	203,930
	Total ...	144,211	133,169	352,566	216,412	388,134	128,261	5,173,145	5,355,333

Sex in four main classes in the Districts of Burma during the year 1939.

4								5								1
Number of deaths registered.								Ratio of deaths per 1,000 of population.								No.
Christians.		Mahomedans.		Hindus.		Burmese or Buddhists.		Christians.		Mahomedans.		Hindus.		Burmese or Buddhists.		
Mal e.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
...	1	2,507	2,232	117	33	3,879	3,586	...	6.99	18.85	20.40	7.78	20.11	22.80	21.40	1
4	1	72	62	3	...	1,779	1,661	38.46	9.26	19.27	20.96	4.19	...	18.92	16.43	2
17	14	60	56	3	2	1,255	1,094	25.60	23.57	17.26	19.93	4.95	22.22	21.63	18.14	3
436	332	894	466	2,161	1,163	3,033	2,612	25.51	24.07	15.92	31.82	19.17	41.29	43.37	39.86	4
127	109	138	74	372	162	4,726	4,347	22.27	19.17	17.44	23.80	13.64	11.76	22.65	20.63	5
74	66	86	50	140	69	6,659	5,871	16.40	25.11	22.07	30.98	20.01	33.29	28.46	23.76	6
51	36	131	72	386	181	3,814	3,488	13.80	13.07	13.69	18.16	10.80	10.97	22.90	21.12	7
202	191	149	81	441	239	3,102	2,907	19.13	19.39	21.38	24.70	19.83	26.44	23.56	22.19	8
10	9	80	42	183	76	6,492	6,099	12.02	13.76	23.92	26.04	30.73	39.67	34.29	30.46	9
392	350	149	105	282	96	5,814	5,389	19.95	17.42	18.11	33.18	21.10	42.09	23.49	21.39	10
79	76	66	49	108	43	7,375	7,086	10.32	9.66	17.53	23.76	18.34	30.94	25.79	23.74	11
325	285	110	75	152	43	4,323	3,837	26.42	24.18	9.11	24.36	13.18	27.76	22.15	20.10	12
99	75	93	49	79	35	4,526	3,997	14.34	10.21	19.86	30.95	10.77	29.09	26.91	23.27	13
141	120	84	30	221	91	4,398	4,129	22.22	20.91	13.59	30.61	13.01	16.33	30.00	29.27	14
34	18	132	73	170	110	4,750	4,530	11.97	6.38	12.71	12.90	11.45	14.18	19.44	18.90	15
61	62	409	310	370	173	4,058	3,660	13.12	13.09	21.63	23.93	20.84	25.12	18.23	16.99	16
32	40	59	33	154	34	1,883	1,851	13.85	18.37	30.51	29.54	48.28	62.62	22.88	22.49	17
54	78	168	148	74	73	1,172	1,126	10.88	17.34	21.40	22.08	12.96	36.66	18.69	18.41	18
338	325	132	80	262	95	3,833	3,431	15.82	15.53	20.39	25.09	17.09	11.25	22.50	20.11	19
8	8	26	22	24	3	4,030	4,066	27.87	35.71	20.70	29.77	13.90	5.46	32.42	31.48	20
..	...	10	6	23	6	3,858	3,817	...	...	9.79	14.12	13.47	19.42	29.42	27.65	21
5	5	41	25	78	34	6,406	6,492	3.16	6.20	9.87	22.07	8.74	24.53	27.36	26.57	22
...	...	5	2	7	4	6,931	7,145	...	...	5.56	7.52	6.03	20.30	29.27	27.96	23
75	81	336	255	412	241	4,580	4,266	13.62	19.40	23.91	24.51	21.43	26.30	30.64	27.53	24
...	1	133	96	48	25	2,160	2,088	...	3.11	35.83	26.76	41.59	94.34	31.13	28.95	25
5	4	69	65	23	15	3,719	3,899	18.25	17.62	26.45	27.99	9.17	17.20	26.29	24.48	26
3	1	33	28	26	11	4,786	4,754	13.57	6.13	36.11	64.97	14.62	21.74	21.22	19.60	27
40	28	260	228	105	62	6,399	6,224	28.78	24.91	32.00	31.59	20.47	28.27	36.25	33.86	28
13	17	116	99	37	15	8,428	8,272	9.71	14.59	24.29	22.83	13.85	18.94	41.18	36.60	29
..	1	40	39	24	5	5,003	5,027	...	2.17	23.47	29.10	12.71	6.23	32.14	28.99	30
1	3	10	5	10	1	6,079	6,409	5.35	24.79	12.00	15.48	10.06	2.91	34.51	31.43	31
2,626	2,337	6,598	4,957	6,495	3,140	139,250	133,160	18.21	17.55	18.71	22.91	16.73	24.48	26.92	24.86	

ANNUAL STATEMENT NO. VI-A.—*Births and Deaths from different causes, registered*

1	2	3	4				5	6	7	8	9	10
No.	Divisions and Districts.	Population (Census 1931).	Births.			Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.
			Male.	Female.	Total.							
ARAKAN DIVISION.												
1	Akyab ...	595,194	10,593	9,597	20,190	33·92	51	27	...	8,454	771	292
2	Kyaukpyu ...	216,060	3,397	3,122	6,519	30·17	...	...	...	1,691	138	59
3	Sandoway ...	125,175	1,824	1,758	3,582	28·62	...	...	...	1,242	20	5
PEGU DIVISION.												
4	Pegu ...	460,395	7,953	7,651	15,604	33·89	41	..	48	2,654	62	3
5	Tharrawaddy ...	454,471	8,385	8,049	16,434	36·16	430	4	1	5,028	126	76
6	Hanthawaddy ...	384,785	6,848	6,511	13,359	34·72	13	2	...	1,765	35	17
7	Insein ...	279,595	5,099	4,978	10,077	36·04	8	4	7	1,908	70	28
8	Prome ...	360,469	6,392	5,923	12,315	34·16	71	..	35	6,385	43	2
IRRAWADDY DIVISION.												
9	Bassein ...	514,135	9,509	9,305	18,814	36·59	59	1	5	3,650	260	46
10	Henzada ...	571,395	9,732	9,398	19,130	33·48	291	3	2	5,984	244	60
11	Myaungmya ...	419,905	8,175	7,702	15,877	37·81	17	1	7	2,386	133	65
12	Maubin ...	346,353	6,561	6,085	12,646	36·51	148	3	...	3,813	96	28
13	Pyapôn ...	311,162	5,397	5,497	10,894	35·01	64	1	...	2,378	229	167
TENASSERIM DIVISION.												
14	Thatôn ...	509,166	9,227	8,696	17,923	35·20	13	...	...	5,828	71	4
15	Amherst ...	444,152	8,103	7,937	16,040	36·11	5	...	...	1,637	98	146
16	Tavoy ...	150,946	2,799	2,690	5,489	36·36	...	...	...	2,186	34	18
17	Mergui ...	141,582	2,142	2,008	4,150	29·31	...	...	...	1,337	60	37
18	Toungoo ...	391,922	5,997	5,667	11,664	29·76	14	...	4	3,257	85	31
MAGWE DIVISION.												
19	Thayetmyo ...	252,387	4,976	5,091	10,067	39·89	10	...	13	4,565	22	10
20	Minbu ...	265,217	4,529	4,353	8,882	33·49	...	...	45	4,165	53	74
21	Magwe ...	459,097	8,348	8,142	16,490	35·92	...	...	61	7,281	54	4
22	Pakôkku ...	476,066	9,614	9,161	18,775	39·44	6	...	138	6,156	188	9
MANDALAY DIVISION.												
23	Mandalay ...	196,687	2,508	2,332	4,840	24·61	1	...	33	2,033	14	10
24	Kyauksè ...	143,967	2,344	2,262	4,606	31·99	...	...	30	2,541	150	133
25	Meiktila ...	301,169	4,654	4,691	9,345	31·03	...	...	732	2,053	177	12
26	Myingyan ...	438,982	5,001	5,082	10,083	22·97	...	...	367	1,556	57	50
27	Yamèthin ...	358,090	8,733	8,523	17,256	48·19	...	...	114	5,039	95	36
SAGAING DIVISION.												
28	Shwebo ...	431,765	9,513	9,617	19,130	44·31	...	...	200	8,798	147	29
29	Sagaing ...	316,766	6,489	6,428	12,917	40·78	10	...	412	3,916	126	18
30	Lower Chindwin ...	372,634	7,452	7,352	14,804	39·73	...	...	28	5,574	164	1,523
Total, Rural Districts, Burma.		10,689,689	192,294	185,608	377,902	35·35	1,252	46	2,282	115,260	3,822	2,992

in the Rural Districts of Burma during the year 1939.

11							12	13	14											No.	
Injuries.							All other causes.	Total deaths from all causes.	Ratio of Deaths per 1,000 of population.												
Suicide		Wounding or accident.	Snake-bite.	Killed by wild beasts.	Rabies.	Total.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all causes.				
Male.	Female.																For the year.	Mean of previous five years			
5	8	109	7	3	2	134	2,471	12,200	0·09	0·05	...	14·20	1·30	0·49	0·23	4·15	20·50	19·58	1		
5	2	33	3	6	...	49	1,818	3,755	...	...	...	7·83	0·64	0·27	0·23	8·41	17·38	16·53	2
1	...	41	1	...	...	43	1,141	2,451	...	...	...	9·92	0·16	0·04	0·34	9·12	19·58	23·27	3
6	2	52	93	1	1	155	6,120	9,083	0·09	...	0·10	5·76	0·13	0·01	0·34	13·29	19·73	17·75	4		
7	6	92	217	1	9	332	5,375	11,372	0·95	0·01	0·00	11·06	0·28	0·17	0·73	11·83	25·02	21·88	5		
7	4	60	53	1	3	128	5,735	7,695	0·03	0·01	...	4·59	0·09	0·04	0·33	14·90	20·00	20·65	6		
1	3	46	71	6	4	131	3,677	5,833	0·03	0·01	0·03	6·82	0·25	0·10	0·47	13·15	20·86	19·69	7		
10	3	39	49	1	8	110	4,217	10,863	0·20	...	0·10	17·71	0·12	0·01	0·31	11·70	30·14	25·24	8		
1	4	40	37	...	5	87	6,663	10,771	0·11	0·00	0·01	7·10	0·51	0·09	0·17	12·96	20·95	18·07	9		
1	4	44	68	...	3	120	6,654	13,358	0·51	0·01	0·00	10·47	0·43	0·11	0·21	11·65	23·38	18·52	10		
7	2	62	45	...	...	116	5,683	8,408	0·04	0·00	0·02	5·68	0·32	0·15	0·28	13·53	20·02	21·79	11
6	3	37	77	1	1	125	3,882	8,095	0·43	0·01	...	11·01	0·28	0·08	0·36	11·21	23·37	21·84	12		
1	2	119	34	...	1	157	5,654	8,650	0·21	0·00	...	7·64	0·74	0·54	0·50	18·17	27·80	25·97	13		
4	2	54	17	2	2	81	3,408	9,405	0·03	...	...	11·45	0·14	0·01	0·16	6·69	18·47	16·20	14
3	...	89	26	...	...	118	5,130	7,134	0·01	...	...	3·69	0·22	0·33	0·27	11·55	16·06	17·49	15
1	1	31	1	...	...	34	804	3,076	...	...	...	14·48	0·23	0·12	0·23	5·33	20·38	24·86	16
3	4	51	...	7	2	67	839	2,340	...	...	...	9·44	0·42	0·26	0·47	5·93	16·53	20·62	17
7	3	71	60	...	1	142	4,246	7,779	0·04	...	0·01	8·31	0·22	0·08	0·36	10·83	19·85	20·49	18		
3	3	34	23	3	1	67	2,782	7,469	0·04	...	0·05	18·09	0·09	0·04	0·27	11·02	29·59	21·91	19		
...	...	54	73	2	10	139	2,936	7,412	...	...	0·17	15·17	0·20	0·28	0·52	11·07	27·95	26·34	20
6	6	29	177	...	7	225	3,826	11,451	...	...	0·13	15·86	0·12	0·01	0·49	8·33	24·94	19·89	21
9	7	105	144	32	10	307	6,386	13,190	0·01	...	0·29	12·93	0·39	0·02	0·64	13·41	27·71	24·90	22		
...	...	15	17	1	...	33	1,895	4,019	0·01	...	0·17	10·34	0·07	0·05	0·17	9·63	20·43	21·33	23		
1	...	23	5	3	...	32	1,372	4,258	...	...	0·21	17·65	1·04	0·92	0·22	9·53	29·58	26·18	24
3	2	19	148	2	3	177	4,322	7,473	...	...	2·43	6·82	0·59	0·04	0·59	14·35	24·81	21·15	25
2	2	63	129	4	1	201	5,604	7,835	...	...	0·84	3·54	0·13	0·11	0·46	12·77	17·85	14·58	26
...	3	35	85	...	7	130	6,813	12,227	...	...	0·32	14·07	0·27	0·10	0·36	19·03	34·15	25·14	27
7	8	63	169	1	14	262	6,987	16,423	...	...	0·46	20·38	0·34	0·07	0·61	16·18	38·04	30·78	28
3	5	44	157	...	7	216	4,841	9,539	0·03	...	1·30	12·36	0·40	0·06	0·68	15·28	30·11	27·25	29		
2	5	45	123	...	5	180	4,549	12,018	...	...	0·08	14·96	0·44	4·09	0·48	12·21	32·25	26·43	30
112	94	1,599	2,109	77	107	4,098	125,830	255,582	0·12	0·00	0·21	10·78	0·36	0·28	0·38	11·77	23·91	21·44			

ANNUAL STATEMENT NO. VI-B.—*Births and Deaths registered from*

1	2	3	4				5	6	7	8	9	10
No.	Divisions and Towns.	Population (Census 1931).	Births.			Birth rate.	Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.
			Male.	Female.	Total.							
ARAKAN DIVISION.												
1	Akyab ...	38,094	432	393	825	21·66	2	...	...	61	28	169
2	Minbya ...	2,244	34	36	70	31·19	3	...	...	56	2	2
3	Kyaukpyu ...	4,232	76	74	150	35·44	...	...	...	23	2	4
4	Sandoway ...	4,070	49	43	92	22·60	...	...	...	9	...	32
PEGU DIVISION.												
5	Rangoon ...	398,967	6,035	5,474	11,509	28·85	11	68	6	232	727	3,279
6	Rangoon Cantonment	1,448	2	...	2	1·38	...	...	...	1	1	1
7	Pegu ...	21,626	442	456	898	41·52	...	...	14	151	61	158
8	Nyaunglebin ...	7,790	142	156	298	38·25	12	...	...	30	23	64
9	Tharrawaddy ...	7,131	124	104	228	31·97	1	...	4	38	14	39
10	Thônzè ...	7,962	144	148	292	36·67	...	...	9	24	17	41
11	Zigôn ...	6,365	107	80	187	29·38	9	2	14	60	20	35
12	Letpadan ...	12,160	159	172	331	27·22	10	...	9	65	12	53
13	Gyobingauk ...	7,675	123	127	250	32·57	38	...	...	49	16	21
14	Minhla ...	4,413	73	63	136	30·82	...	...	...	23	7	13
15	Nattalin ...	5,633	66	73	139	24·68	2	...	4	8	2	30
16	Syriam ...	15,070	269	246	515	34·17	...	1	...	59	19	68
17	Thôngwa ...	8,976	169	149	318	35·43	...	1	...	49	10	44
18	Insein ...	20,487	292	241	533	26·02	...	...	2	37	44	125
19	Mingaladon Cantmnt.	3,910	42	33	75	19·18	...	...	...	3	15	24
20	Thamaing ...	5,645	92	72	164	29·05	...	2	...	38	8	25
21	Kamayut ...	7,256	126	139	265	36·52	...	1	...	113	14	15
22	Thingangyun ...	7,984	73	50	123	15·41	...	...	...	58	7	12
23	Kanbe ...	6,575	103	105	208	31·63	...	3	...	58	3	4
24	Prome ...	28,295	583	558	1,141	40·33	...	...	17	180	109	247
25	Shwedaung ...	8,408	146	170	316	37·58	1	...	2	170	7	43
26	Paungdè ...	13,479	225	205	430	31·90	3	...	9	77	16	93
IRRAWADDY DIVISION.												
27	Bassein ...	45,662	772	735	1,507	33·00	9	...	12	123	109	327
28	Ngathainggyaung ...	5,380	100	95	195	36·25	...	...	13	28	5	23
29	Kyônpyaw ...	5,866	99	112	211	35·97	1	...	21	36	7	28
30	Henzada ...	28,542	402	456	858	30·06	50	...	1	270	29	126
31	Myanaung ...	9,072	151	145	296	32·63	...	...	...	111	17	28
32	Kyangin ...	6,780	90	80	170	25·07	...	...	...	35	12	16
33	Myaungmya ...	7,773	159	161	320	41·17	...	...	2	23	31	65
34	Wakèma ...	9,359	149	122	271	28·96	1	...	2	54	17	46
35	Moulmeingyun ...	7,747	154	120	274	35·37	8	...	...	55	27	41
36	Maubin ...	8,897	172	166	338	37·99	6	...	...	73	13	29
37	Yandoon ...	9,925	135	150	285	28·72	12	...	...	31	20	79
38	Danubyu ...	6,334	111	120	231	36·47	20	...	16	76	2	37
39	Pyapôn ...	12,338	205	186	391	31·69	...	...	...	46	38	59
40	Kyaiklat ...	10,658	186	192	378	35·47	15	...	...	68	35	64
TENASSERIM DIVISION.												
41	Thatôn ...	16,851	370	352	722	42·85	...	...	...	101	32	104
42	Kyaikto ...	6,611	84	89	173	26·17	...	...	20	33	16	26
43	Moulmein ...	65,506	1,067	971	2,038	31·11	...	1	...	242	176	426
44	Kawkareik ...	6,575	162	153	315	47·91	...	...	...	69	11	12
45	Tavoy ...	29,018	560	531	1,091	37·60	...	...	...	499	42	180

different causes in the Towns of Burma during the year 1939—contd.

11							12	13	14										
Injuries.							All other causes.	Total deaths from all causes.	Ratio of Deaths per 1,000 of population.										
Suicide.		Wounding or accident.	Snake-bite.	Killed by wild beasts.	Rabies.	Total.			Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all causes.		
Male.	Female.																For the year.	Mean of previous five years.	
4	1	26	...	...	1	32	446	738	0.05	...	...	1.60	0.74	4.44	0.84	11.71	19.37	20.10
...	...	1	...	...	...	1	4	68	1.34	...	...	24.96	0.89	0.89	0.45	1.78	30.30	25.76
...	...	4	...	...	...	4	42	75	...	...	...	5.43	0.47	0.95	0.95	9.92	17.72	13.80
...	...	3	...	...	...	3	45	89	...	...	...	2.21	...	7.86	0.74	11.06	21.87	21.77
5	2	237	7	...	6	257	6,738	11,318	0.03	0.17	0.02	0.58	1.82	8.22	0.64	16.89	28.37	26.53	
...	6	9	...	...	...	0.69	0.69	0.69	...	4.14	6.22	5.39	
...	...	21	3	...	...	24	509	917	...	...	0.65	6.98	2.82	7.31	1.11	23.54	42.40	39.33
...	...	21	...	1	...	22	212	363	1.54	...	...	3.85	2.95	8.22	2.82	27.21	46.60	39.36
1	...	9	1	...	...	11	113	220	0.14	...	0.56	5.33	1.96	5.47	1.54	15.85	30.85	23.25
...	...	3	3	...	...	6	195	292	...	...	1.13	3.01	2.14	5.15	0.75	24.49	36.67	31.12
...	...	1	...	...	...	1	129	270	1.41	0.31	2.20	9.43	3.14	5.50	0.16	20.27	42.42	33.12
2	...	17	1	...	1	21	217	387	0.82	...	0.74	5.35	0.99	4.36	1.73	17.85	31.83	22.20	
...	...	18	2	...	...	20	149	293	4.95	...	...	6.38	2.08	2.74	2.61	19.41	38.18	37.58
...	...	6	...	...	...	6	68	117	...	...	...	5.21	1.59	2.95	1.36	15.41	26.51	22.48
...	111	157	0.36	...	0.71	1.42	0.36	5.33	...	19.71	27.87	22.26	
2	1	25	1	...	...	29	303	479	...	0.07	...	3.92	1.26	4.51	1.92	20.11	31.79	24.09
...	...	9	...	...	...	9	174	287	...	0.11	...	5.46	1.11	4.90	1.00	19.39	31.97	30.61
...	...	53	1	...	...	54	388	650	...	...	0.10	1.81	2.15	6.10	2.64	18.94	31.73	27.81
...	...	1	...	...	...	1	23	66	...	...	...	0.77	3.84	6.14	0.26	5.88	16.88	13.50
...	...	4	...	...	...	4	215	292	...	0.35	...	6.73	1.42	4.43	0.71	38.09	51.73	42.09
...	...	2	...	...	...	2	134	279	...	0.14	...	15.57	1.93	2.67	0.28	18.47	38.45	33.13
1	...	2	...	...	...	3	109	189	...	...	...	7.26	0.88	1.50	0.38	13.65	23.67	23.47
...	...	1	...	...	...	1	134	203	...	0.46	...	8.82	0.46	0.61	0.15	20.38	30.87	25.95
...	...	59	1	...	3	63	722	1,338	...	...	0.60	6.36	3.85	8.73	2.23	25.52	47.29	39.29
...	...	4	...	...	...	4	167	394	0.12	...	0.24	20.22	0.83	5.11	0.48	19.86	46.86	32.25
3	1	34	...	...	...	38	215	451	0.22	...	0.67	5.71	1.19	6.90	2.82	15.95	33.46	29.35
2	1	35	...	...	1	39	913	1,532	0.20	...	0.26	2.69	2.39	7.16	0.85	19.99	33.55	34.47
...	...	3	...	...	2	5	102	176	...	...	2.42	5.20	0.93	4.28	0.93	18.96	32.71	32.64
...	...	4	...	...	...	4	107	204	0.17	...	3.58	6.14	1.19	4.77	0.68	18.24	34.78	26.83
1	...	25	...	...	2	28	583	1,087	1.75	...	0.04	9.46	1.02	4.41	0.98	20.43	38.08	29.33
...	...	4	...	...	2	6	142	304	...	...	...	12.24	1.87	3.09	0.66	15.65	33.51	33.97
...	...	1	...	...	...	1	144	208	...	...	...	5.16	1.77	2.36	0.15	21.24	30.68	33.83
1	...	15	...	...	1	17	179	317	...	...	0.26	2.96	3.99	8.36	2.19	23.03	40.78	38.26
...	1	12	...	...	...	13	166	299	0.11	...	0.21	5.77	1.82	4.92	1.39	17.74	31.95	31.99
...	...	9	...	...	...	9	216	356	1.03	...	...	7.10	3.49	5.29	1.16	27.88	45.95	42.65
...	...	8	1	...	...	9	190	320	0.67	...	...	8.21	1.46	3.26	1.01	21.36	35.97	30.06
1	...	11	...	...	...	12	211	365	1.21	...	...	3.12	2.02	7.96	1.21	21.26	36.78	30.17
...	...	2	...	...	...	2	128	281	3.16	...	2.53	12.00	0.32	5.84	0.32	20.21	44.36	32.05
...	...	17	...	...	1	18	258	419	...	...	...	3.73	3.08	4.78	1.46	20.91	33.96	31.35
...	1	19	...	...	1	21	260	463	1.41	...	...	6.38	3.28	6.00	1.97	24.39	43.44	40.31
...	...	33	...	...	...	33	291	561	...	...	...	5.99	1.90	6.17	1.96	17.27	33.29	39.00
...	...	7	...	...	1	8	121	224	...	...	3.03	4.99	2.42	3.93	1.21	18.30	33.88	33.49
1	...	88	1	...	...	90	1,024	1,959	...	0.02	...	3.69	2.69	6.50	1.37	15.63	29.91	31.18
2	...	5	...	...	...	7	124	223	...	...	...	10.49	1.67	1.83	1.06	18.86	33.92	35.80
3	...	26	...	...	...	29	428	1,178	...	...	...	17.20	1.45	6.20	1.00	14.75	40.60	39.91

ANNUAL STATEMENT NO. VI-B.—Births and Deaths registered from

1	2	3	4				5	6	7	8	9	10
No.	Divisions and Towns.	Population (Census 1931).	Births.				Cholera.	Small-pox.	Plague.	Fever.	Dysentery and Diarrhoea.	Respiratory Diseases.
			Male.	Female.	Total.	Birth rate.						
	TENASSERIM DIVISION —concl'd.											
46	Mergui ...	20,405	380	386	766	37.54	...	...	...	229	24	338
47	Toungoo ...	23,223	383	369	752	32.38	...	...	1	106	60	111
48	Shwegyin ...	5,876	101	123	224	38.12	...	...	1	37	13	35
49	Pyu ...	7,807	163	158	321	41.12	...	...	...	40	32	49
	MAGWE DIVISION.											
50	Thayetmyo ...	9,279	155	192	347	37.40	...	...	1	65	6	50
51	Allanmyo ...	12,511	210	218	428	34.21	...	...	52	119	15	120
52	Minbu ...	6,005	117	111	228	37.97	...	...	2	17	3	60
53	Salin ...	6,654	103	104	207	31.11	...	...	2	50	6	30
54	Magwe ...	8,209	152	163	315	38.37	...	...	12	20	27	87
55	Taungdwingyi ...	8,339	215	239	454	54.44	1	...	...	57	4	61
56	Yenangyaung ...	11,098	265	226	491	44.24	...	...	5	19	28	140
57	Chauk ...	12,830	236	222	458	35.70	...	...	...	115	14	25
58	Pakôkku ...	23,115	417	392	809	35.00	...	...	4	37	38	354
	MANDALAY DIVISION.											
59	Mandalay ...	134,950	4,063	3,621	7,684	56.94	...	...	173	436	248	1,198
60	Mandalay Cantonment	12,982	180	149	329	25.34	...	...	12	76	2	46
61	Maymyo ...	16,586	402	408	810	48.84	...	...	...	76	49	135
62	Maymyo Cantonment	4,749	113	99	212	44.64	...	...	...	5	12	27
63	Myitngè ...	5,682	69	71	140	24.64	...	...	1	20	4	14
64	Kyauksè ...	7,353	182	151	333	45.29	...	...	3	56	10	25
65	Meiktila ...	8,830	173	164	337	38.17	...	...	58	22	16	64
66	Myingyan ...	25,457	584	544	1,128	44.31	1	...	302	21	31	401
67	Nyaung-u ...	8,118	135	148	283	34.86	...	...	8	13	5	26
68	Yamèthin ...	9,291	224	195	419	45.10	...	...	2	69	5	50
69	Pyinmana ...	17,656	395	332	727	41.18	...	...	24	82	31	103
70	Pyawbwè ...	5,783	124	99	223	38.56	...	...	51	33	6	12
	SAGAING DIVISION.											
71	Shwebo ...	11,286	248	247	495	43.86	...	...	58	34	27	75
72	Ye-u ...	3,739	82	66	148	39.58	...	...	...	14	11	19
73	Sagaing ...	14,127	274	253	527	37.30	...	...	8	42	13	92
74	Myinmu ...	5,072	99	123	222	43.77	...	...	5	21	12	27
75	Mônýwa ...	10,800	235	225	460	42.59	...	...	22	68	34	169
	Total of Towns, Burma	1,412,601	25,735	24,101	49,836	35.28	216	79	984	5,644	2,609	10,300
	Total of Rural Districts, Burma.	10,689,689	192,294	185,608	377,902	35.35	1,252	46	2,282	115,260	3,822	2,992
	GRAND TOTAL, BURMA	12,102,290	218,029	209,709	427,738	35.34	1,468	125	3,266	120,904	6,431	13,292
	TOWNS FOR WHICH CORRESPONDING RURAL FIGURES ARE NOT GIVEN IN VI-A.											
1	Bhamo ...	8,011	143	134	277	34.58	...	...	8	68	35	60
2	Myitkyina ...	7,328	155	141	296	40.39	...	...	...	74	32	99
3	Mawlaik ...	2,278	59	69	128	56.19	1	...	...	38	3	22
4	Lashio ...	4,638	136	130	266	57.35	...	1	...	184	8	67
5	Taunggyi ...	8,652	229	206	435	50.28	...	...	13	55	15	91
6	Kalaw ...	3,621	57	66	123	33.97	...	...	...	17	6	16

different causes in the Towns of Burma during the year 1939—concl'd.

11							12	13	14									
Injuries.							All other causes.	Total deaths from all causes.	Ratio of Deaths per 1,000 of population.									
Suicide.		Wounding or accident.	Snake-bite.	Killed by wild beasts.	Rabies.	Total.			Cholera.	Small-pox.	Plague.	Fevers.	Dysentery and Diarrhoea.	Respiratory Diseases.	Injuries.	All other causes.	From all causes.	
Male.	Female.																For the year.	Mean of previous five years.
1	...	43	...	...	...	44	268	903	...	...	...	11.22	1.18	16.56	2.16	13.13	44.25	42.79
...	...	20	1	...	...	21	308	607	...	...	0.04	4.56	2.58	4.78	0.90	13.26	26.14	29.33
...	...	2	...	...	...	2	108	196	...	...	0.17	6.30	2.21	5.96	0.34	18.38	33.36	32.40
...	...	18	...	...	...	18	135	274	...	...	...	5.12	4.10	6.28	2.31	17.29	35.10	34.58
...	...	29	1	...	...	30	162	314	...	...	0.11	7.01	0.65	5.39	3.23	17.46	33.84	41.94
...	...	3	...	...	...	3	165	474	...	...	4.16	9.51	1.20	9.59	0.24	13.19	37.89	32.02
...	...	6	4	...	3	43	95	190	...	...	0.33	2.83	0.50	9.99	2.16	15.82	31.64	31.61
...	...	9	...	...	1	10	120	218	...	...	0.30	7.51	0.90	4.51	1.50	18.03	32.76	34.51
...	...	4	1	...	...	5	182	333	...	...	1.46	2.44	3.29	10.60	0.61	22.17	40.57	35.42
...	...	22	1	...	...	23	364	510	0.12	...	...	6.84	0.48	7.32	2.76	43.65	61.16	51.47
1	1	13	1	...	...	16	266	474	...	...	0.45	1.71	2.52	12.61	1.44	23.97	42.71	38.94
...	...	9	1	...	1	11	171	336	...	...	...	8.96	1.09	1.95	0.86	13.33	26.19	22.18
...	...	8	7	...	3	18	560	1,011	...	...	0.17	1.60	1.64	15.31	0.78	24.23	43.74	43.43
9	1	56	3	...	2	71	3,164	5,290	...	...	1.28	3.23	1.84	8.88	0.53	23.45	39.20	43.01
...	...	6	1	...	...	7	222	365	...	...	0.92	5.85	0.15	3.54	0.54	17.10	28.12	27.07
...	1	8	...	...	...	9	255	524	...	...	...	4.58	2.95	8.14	0.54	15.37	31.59	29.42
...	...	2	...	...	...	2	29	75	...	...	...	1.05	2.53	5.69	0.42	6.11	15.79	11.92
...	...	4	...	...	...	4	54	97	...	...	0.18	3.52	0.70	2.46	0.70	9.50	17.07	19.18
...	...	10	1	1	...	12	187	293	...	...	0.41	7.62	1.36	3.40	1.63	25.43	39.85	37.64
1	...	19	...	...	...	20	161	341	...	...	6.57	2.49	1.81	7.25	2.27	18.23	38.62	35.67
1	...	48	1	...	...	50	742	1,548	0.04	...	11.86	0.82	1.22	15.75	1.96	29.15	60.81	41.51
...	...	4	1	...	...	5	229	286	...	...	0.99	1.60	0.52	3.20	0.62	28.21	35.23	34.76
...	...	10	...	...	...	10	148	284	...	...	0.22	7.43	0.54	5.38	1.08	15.93	30.57	27.75
1	...	22	...	2	...	25	412	677	...	...	1.36	4.64	1.76	5.83	1.42	23.33	38.34	36.56
2	...	8	1	...	...	11	133	246	...	...	8.82	5.71	1.04	2.08	1.90	23.00	42.54	44.99
...	...	27	...	...	...	27	305	526	...	...	5.14	3.01	2.39	6.65	2.39	27.02	46.61	35.62
...	...	7	...	...	...	7	62	113	...	...	...	3.74	2.94	5.08	1.87	16.58	30.22	26.75
1	...	23	...	...	...	24	256	435	...	...	0.57	2.97	0.92	6.51	1.70	18.12	30.79	32.11
...	107	172	...	...	0.99	4.14	2.37	5.32	...	21.10	33.91	39.47
...	...	7	...	...	...	7	205	505	...	...	2.04	6.30	3.15	15.65	0.65	18.98	46.76	36.91
46	11	1,332	47	4	32	1,472	26,730	48,034	0.15	0.06	0.70	4.00	1.85	7.29	1.04	18.92	34.00	32.02
112	94	1,599	2109	77	107	4,098	125,830	255,582	0.12	0.00	0.21	10.78	0.36	0.28	0.38	11.77	23.91	21.44
158	105	2,931	21,56	81	139	5,570	152,560	303,616	0.12	0.01	0.27	9.99	0.53	1.10	0.46	12.61	25.09	22.68
1	...	9	...	...	1	11	79	261	...	...	1.00	8.49	4.37	7.49	1.37	9.86	32.58	31.68
...	...	15	...	...	...	15	112	332	...	...	...	10.10	4.37	13.51	2.05	15.28	45.31	39.19
...	...	2	...	...	...	2	39	105	0.44	...	...	16.68	1.32	9.66	0.88	17.12	46.09	41.44
...	...	12	...	...	...	12	83	355	...	0.22	...	39.67	1.72	14.45	2.59	17.90	76.54	45.02
1	1	5	...	...	...	7	109	290	...	...	1.50	6.36	1.73	10.52	0.81	12.60	33.52	32.87
...	28	67	...	...	...	4.69	1.66	4.42	...	7.73	18.50	23.25

STATEMENT VI-B (a).—*Supplement*

No.	Divisions and Towns.	Population (Census 1931).	Fevers.									
			1		2		3		5		6	
			Malaria.		Enteric Fever.		Measles.		Kala-Azar.		Influenza.	
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
ARAKAN DIVISION.												
1	Akyab ...	38,094	39	1·02	4	0·11	...	...	3	0·08	...	...
2	Minbya ...	2,244	18	8·02	...	...	...	...	...	...	...	...
3	Kyaukpyu ...	4,232	4	0·95	...	...	...	...	...	...	...	...
4	Sandoway ...	4,070	4	0·93	2	0·49	...	...	...	...	...	...
PEGU DIVISION.												
5	Rangoon ...	398,967	120	0·30	85	0·21	2	0·01	1	0·00	5	0·01
6	Rangoon Cantonment	1,448	1	0·69	...	...	...	...	...	...	...	...
7	Pegu ...	21,626	66	3·05	...	...	...	...	...	...	...	...
8	Nyaunglebin ...	7,790	27	3·47	...	...	1	0·13	...	...	...	...
9	Tharrawaddy ...	7,131	14	1·96	1	0·14	...	...	...	...	...	...
10	Thônzè ...	7,962	22	2·76	1	0·13	...	...	...	...	...	...
11	Zigôn ...	6,365	41	6·44	6	0·94	...	...	...	...	...	...
12	Letpadan ...	12,160	58	4·77	3	0·25	...	...	...	...	...	...
13	Gyobingauk ...	7,675	21	2·74	2	0·26	...	...	...	...	...	...
14	Minhla ...	4,413	18	4·08	...	...	...	...	...	...	...	...
15	Nattalin ...	5,633	8	1·42	...	...	...	...	...	...	...	...
16	Syriam ...	15,070	8	0·53	11	0·73	...	...	...	...	...	...
17	Thôngwa ...	8,976	43	4·79	...	...	3	0·33	...	...	...	...
18	Insein ...	20,487	16	0·78	3	0·15	...	...	...	...	...	...
19	Mingaladon Cantonment	3,910	...	...	...	...	...	...	...	...	...	...
20	Thamaing ...	5,645	1	0·18	1	0·18	...	...	...	...	...	...
21	Kamayut ...	7,256	...	...	...	...	...	...	...	...	...	...
22	Thingangyun ...	7,984	...	...	...	...	...	...	...	...	...	...
23	Kanbe ...	6,575	...	...	...	...	...	...	...	...	...	...
24	Prome ...	28,295	131	4·63	11	0·39	...	...	...	...	...	...
25	Shwedaung ...	8,408	134	15·94	1	0·12	...	...	...	...	...	...
26	Paungdè ...	13,479	64	4·75	7	0·52	...	...	...	...	4	0·30
IRRAWADDY DIVISION.												
27	Bassein ...	45,662	50	1·10	20	0·44	...	...	...	...	...	...
28	Ngathainggyaung ...	5,380	18	3·35	2	0·37	...	...	...	...	...	...
29	Kyônpyaw ...	5,866	32	5·46	...	...	...	...	...	...	...	...
30	Henzada ...	28,542	139	4·87	4	0·14	...	...	...	...	...	...
31	Myanaung ...	9,072	87	9·59	...	...	...	...	...	...	...	...
32	Kyangin ...	6,780	28	4·13	...	...	...	...	...	...	...	...
33	Myaungmya ...	7,773	19	2·44	1	0·13	...	...	...	...	...	...
34	Wakèma ...	9,359	34	3·63	...	...	1	0·11	...	...	1	0·11
35	Moulmeingyun ...	7,747	35	4·52	...	...	...	...	...	...	...	...
36	Maubin ...	8,897	13	1·46	...	...	...	...	...	...	...	...
37	Yandoon ...	9,925	8	0·81	10	1·01	...	...	...	...	2	0·20
38	Danubyu ...	6,334	...	...	3	0·47	...	...	...	...	...	...
39	Pyapôn ...	12,338	16	1·30	1	0·08	...	...	...	...	...	...
40	Kyaiklat ...	10,658	44	4·13	...	...	...	...	...	...	...	...
TENASSERIM DIVISION.												
41	Thatôn ...	16,851	69	4·09	1	0·06	...	...	...	...	...	...
42	Kyaikto ...	6,611	20	3·03	3	0·45	2	0·30	...	...	...	...
43	Moulmein ...	65,506	116	1·77	34	0·52	...	...	1	0·02	...	...
44	Kawkareik ...	6,575	29	4·41	...	...	...	...	...	...	...	...
45	Tavoy ...	29,018	225	7·75	7	0·24	...	...	...	...	...	...

NOTE.—Column 4, "Relapsing Fever"

to Annual Statement VI-B, 1939.

										Dysentery and	
7		8		9		10		11		12	
Cerebrospinal Fever.		Typhus Fever.		Blackwater Fever.		Other Fevers.		Total Fevers.		Dysentery.	
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
1	0.03	...	...	...	...	14	0.37	61	1.60	24	0.63
...	38	16.93	56	24.96	2	0.89
1	0.24	...	...	...	...	18	4.25	23	5.43	...	...
...	3	0.74	9	2.21	...	...
16	0.04	1	0.00	1	0.00	1	0.00	232	0.58	269	0.67
...	1	0.69	1	0.69
2	0.09	...	...	...	...	83	3.84	151	6.98	30	1.39
...	2	0.26	30	3.85	13	1.67
...	23	3.23	38	5.33	6	0.84
...	1	0.13	24	3.01	3	0.38
...	...	1	0.16	...	...	12	1.89	60	9.43	11	1.73
...	4	0.33	65	5.35	10	0.82
...	26	3.39	49	6.38	3	0.39
...	5	1.13	23	5.21	3	0.68
...	8	1.42	...	...
...	40	2.65	59	3.92	7	0.46
...	3	0.33	49	5.46	4	0.45
...	18	0.88	37	1.81	22	1.07
...	3	0.77	3	0.77	6	1.53
...	36	6.38	38	6.73	6	1.06
...	113	15.57	113	15.57	7	0.96
...	58	7.26	58	7.26	5	0.63
...	58	8.82	58	8.82	2	0.30
...	38	1.34	180	6.36	46	1.63
...	35	4.16	170	20.22	5	0.59
1	0.07	...	...	1	0.07	...	...	77	5.71	7	0.52
...	53	1.16	123	2.69	25	0.55
...	8	1.49	28	5.20	2	0.37
...	4	0.68	36	6.14	7	1.19
...	2	0.07	125	4.38	270	9.46	22	0.77
...	24	2.65	111	12.24	10	1.10
...	7	1.03	35	5.16	7	1.03
...	...	1	0.13	...	...	2	0.26	23	2.96	22	2.83
...	18	1.92	54	5.77	15	1.60
...	20	1.58	55	7.10	20	2.58
...	60	6.74	73	8.21	7	0.79
...	11	1.11	31	3.12	18	1.81
...	73	11.53	76	12.00	...	...
...	29	2.35	46	3.73	22	1.78
1	0.09	...	...	...	...	23	2.16	68	6.38	22	2.06
...	31	1.84	101	5.99	5	0.30
...	8	1.21	33	4.99	4	0.61
4	0.06	...	...	1	0.02	86	1.31	242	3.69	71	1.08
...	40	6.08	69	10.49	3	0.46
...	267	9.20	499	17.20	21	0.72

(Spiro-chaetal)—no deaths reported.

STATEMENT VI-B (a).—*Supplement to*

No.	Divisions and Towns.	Population (Census 1931).	Diarrhœa.		Respiratory Diseases.							
			13		14		15		16		17	
			Diarrhœa.		Pneumonia.		Pulmonary Tuberculosis.		Whooping cough.		Other Respiratory Diseases.	
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
ARAKAN DIVISION.												
1	Akyab ...	38,094	4	0'11	97	2'55	36	0'95	...	...	36	0'95
2	Minbya ...	2,244	...	...	2	0'89	...	...	...	...	...	...
3	Kyaukpyu ...	4,232	2	0'47	3	0'71	1	0'24	...	...	...	...
4	Sandoway ...	4,070	...	...	13	3'19	7	1'72	...	...	12	2'95
PEGU DIVISION.												
5	Rangoon ...	398,967	458	1'15	1,771	4'44	628	1'57	4	0'01	876	2'20
6	Rangoon Cantonment	1,448	...	...	1	0'69	...	...	...	...	...	...
7	Pegu ...	21,626	31	1'43	25	1'16	73	3'38	...	...	60	2'77
8	Nyaunglebin ...	7,790	10	1'28	30	3'85	14	1'80	...	...	20	2'57
9	Tharrawaddy ...	7,131	8	1'12	8	1'12	11	1'54	...	...	20	2'80
10	Thônzè ...	7,962	14	1'76	32	4'02	2	0'25	...	...	7	0'88
11	Zigôn ...	6,365	9	1'41	16	2'51	11	1'73	...	...	8	1'26
12	Letpadan ...	12,160	2	0'16	24	1'97	24	1'97	...	...	5	0'41
13	Gyobingauk ...	7,675	13	1'69	12	1'56	9	1'17	...	...	...	...
14	Minhla ...	4,413	4	0'91	9	2'04	1	0'23	...	...	3	0'68
15	Nattalin ...	5,633	2	0'36	7	1'24	10	1'78	...	...	13	2'31
16	Syriam ...	15,070	12	0'80	38	2'52	22	1'46	...	...	8	0'53
17	Thôngwa ...	8,976	6	0'67	15	1'67	25	2'79	...	...	4	0'45
18	Insein ...	20,487	22	1'07	49	2'39	25	1'22	...	...	51	2'49
19	Mingaladon Cantonment	3,910	9	2'30	...	...	...	...	...	...	24	6'14
20	Thamaing ...	5,645	2	0'35	3	0'53	18	3'19	1	0'18	3	0'53
21	Kamayut ...	7,256	7	0'96	3	0'41	2	0'28	...	...	10	1'38
22	Thingangyun ...	7,984	2	0'25	3	0'38	4	0'50	...	...	5	0'63
23	Kanbe ...	6,575	1	0'15	2	0'30	...	...	...	...	2	0'30
24	Prome ...	28,295	63	2'23	56	1'98	72	2'54	...	...	119	4'21
25	Shwedaung ...	8,408	2	0'24	17	2'02	6	0'71	...	...	20	2'38
26	Paungdè ...	13,479	9	0'67	48	3'56	34	2'52	...	...	11	0'82
IRRAWADDY DIVISION.												
27	Bassein ...	45,662	84	1'84	48	1'05	114	2'50	...	...	165	3'61
28	Ngathainggyaung ...	5,380	3	0'56	14	2'60	5	0'93	...	...	4	0'74
29	Kyônpyaw ...	5,866	...	...	10	1'70	13	2'22	...	...	5	0'85
30	Henzada ...	28,542	7	0'25	38	1'33	22	0'77	...	...	66	2'31
31	Myanaung ...	9,072	7	0'77	10	1'10	13	1'43	...	...	5	0'55
32	Kyangin ...	6,780	5	0'74	6	0'88	10	1'47	...	...	...	...
33	Myaungmya ...	7,773	9	1'16	29	3'73	32	4'12	...	...	4	0'51
34	Wakèma ...	9,359	2	0'21	11	1'18	20	2'14	...	...	15	1'60
35	Moulmeingyun ...	7,747	7	0'90	21	2'71	12	1'55	...	...	8	1'03
36	Maubin ...	8,897	6	0'67	5	0'56	12	1'35	...	...	12	1'35
37	Yandoon ...	9,925	2	0'20	27	2'72	30	3'02	...	...	22	2'22
38	Danubyu ...	6,334	2	0'32	5	0'79	28	4'42	...	...	4	0'63
39	Pyapôn ...	12,338	16	1'30	32	2'59	18	1'46	...	...	9	0'73
40	Kyaiklat ...	10,658	13	1'22	35	3'28	26	2'44	...	...	3	0'28
TENASSERIM DIVISION.												
41	Thatôn ...	16,851	27	1'60	11	0'65	30	1'78	...	...	63	3'74
42	Kyaikto ...	6,611	12	1'82	7	1'06	7	1'06	...	...	12	1'82
43	Moulmein ...	65,506	105	1'60	144	2'20	154	2'35	1	0'02	127	1'94
44	Kawkareik ...	6,575	8	1'22	8	1'22	2	0'30	...	...	2	0'30
45	Tavoy ...	29,018	21	0'72	87	3'00	90	3'10	...	...	3	0'10

NOTES.—Column 19, "Acute Poliomyelitis". and
Column 21, "Chicken-pox—no

Annual Statement VI-B, 1939--contd.

Other Causes.											No.
18		20		22		23		24			
Beri-beri in- cluding Epide- mic Dropsy.		Diphtheria		Mumps.		Tuberculosis of Joints.		Other Tuberculous Diseases.			
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.		
1	0.03	...	...	...	...	...	...	2	0.05	1
...	...	...	...	...	...	...	...	...	...	2
1	0.24	...	...	...	...	...	...	...	...	3
1	0.25	...	...	...	...	...	...	4	0.98	4
...	
116	0.29	17	0.04	1	0.00	5	0.01	65	0.16	5	
...	...	...	...	...	...	...	...	...	...	6
...	...	...	...	...	...	...	...	10	0.46	7
17	2.18	...	...	...	...	...	...	...	...	8
1	0.14	...	...	...	...	...	...	1	0.14	9
...	...	...	...	...	...	...	...	8	1.00	10
...	...	...	...	...	...	...	...	3	0.47	11
...	...	...	...	...	...	...	...	3	0.25	12
...	...	...	...	...	...	...	...	2	0.26	13
...	...	...	...	...	...	...	...	...	...	14
...	...	...	...	...	...	...	...	...	...	15
11	0.73	...	...	...	...	...	...	2	0.13	16
...	...	...	...	...	...	...	...	1	0.11	17
...	...	...	...	...	...	...	...	3	0.15	18
...	...	...	...	...	...	...	...	...	...	19
...	...	...	...	...	...	...	...	...	...	20
...	...	...	...	...	...	...	...	...	...	21
...	...	...	...	...	...	...	...	...	...	22
...	...	...	...	...	...	...	...	...	...	23
2	0.07	3	0.11	...	...	...	...	1	0.04	24
1	0.12	...	...	...	...	...	...	...	...	25
6	0.45	...	...	...	...	...	...	...	...	26
...	
5	0.11	2	0.04	...	...	1	0.02	27	0.59	27
...	...	...	...	...	...	...	...	...	...	28
...	...	...	...	...	...	...	...	...	...	29
1	0.04	...	...	...	...	...	...	2	0.07	30
...	...	...	...	...	...	...	...	...	...	31
...	...	...	...	...	...	...	...	...	...	32
2	0.26	1	0.13	...	...	...	...	2	0.26	33
2	0.21	...	...	...	...	...	...	...	...	34
...	...	...	...	...	...	...	...	2	0.26	35
2	0.22	...	...	...	...	...	...	5	0.56	36
8	0.81	...	...	...	...	2	0.20	...	...	37
4	0.63	...	...	...	...	...	...	...	...	38
9	0.73	...	...	...	...	...	...	3	0.24	39
3	0.28	...	...	...	...	1	0.09	3	0.28	40
...	...	...	...	...	...	...	...	2	0.12	41
...	...	...	...	...	...	1	0.15	...	...	42
10	0.15	2	0.03	...	...	1	0.02	18	0.27	43
...	...	...	...	...	...	...	...	2	0.30	44
...	...	...	...	...	...	...	...	...	...	45

deaths reported.

No.	Divisions and Towns.	Population (Census 1931).	Fevers.									
			1		2		3		5		6	
			Malaria.		Enteric Fever.		Measles.		Kala-Azar.		Influenza.	
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
TENASSERIM DIVISION. —concl'd.												
46	Mergui ...	20,405	218	10·68	1	0·05	...	...	...	...	...	...
47	Toungoo ...	23,223	84	3·62	4	0·17	1	0·04	...	...	1	0·04
48	Shwegyin ...	5,876	16	2·72	...	...	...	...	...	...	1	0·17
49	Pyu ...	7,807	25	3·20	...	...	2	0·26	...	...	...	...
MAGWE DIVISION.												
50	Thayetmyo ...	9,279	35	3·77	4	0·43	...	...	...	...	...	...
51	Allanmyo ...	12,511	72	5·75	19	1·52	...	...	...	...	26	2·08
52	Minbu ...	6,005	17	2·83	...	...	...	...	...	...	...	...
53	Salin ...	6,654	35	5·26	1	0·15	...	...	...	...	...	...
54	Magwe ...	8,209	8	0·97	1	0·12	...	...	...	...	2	0·24
55	Taungdwingyi ...	8,339	54	6·48	...	...	...	...	...	...	...	...
56	Yenangyaung ...	11,098	15	1·35	1	0·09	...	...	1	0·09	...	...
57	Chauk ...	12,830	8	0·62	2	0·16	...	...	...	...	...	...
58	Pakôkku ...	23,115	12	0·52	...	...	...	...	...	...	...	...
MANDALAY DIVISION.												
59	Mandalay ...	134,950	294	2·18	79	0·59	4	0·03	1	0·01	12	0·09
60	Mandalay Cantonment	12,982	25	1·93	2	0·15	...	...	...	...	...	...
61	Maymyo ...	16,586	35	2·11	13	0·78	...	...	...	...	...	...
62	Maymyo Cantonment	4,749	3	0·63	1	0·21	...	...	...	...	...	...
63	Myitngè ...	5,682	1	0·18	...	...	...	...	...	...	...	...
64	Kyauksè ...	7,353	36	4·90	3	0·41	...	...	...	...	...	...
65	Meiktila ...	8,830	9	1·02	2	0·23	...	...	...	...	...	...
66	Myingyan ...	25,457	15	0·59	4	0·16	...	...	...	...	...	...
67	Nyaung-u ...	8,118	3	0·37	...	...	...	...	...	...	...	...
68	Yamèthin ...	9,291	32	3·44	...	...	...	...	...	...	1	0·11
69	Pyinmana ...	17,656	48	2·72	11	0·62	...	...	...	...	1	0·06
70	Pyawbwè ...	5,783	3	0·52	...	...	...	...	...	...	...	...
SAGAING DIVISION.												
71	Shwebo ...	11,286	26	2·30	4	0·35	...	...	...	...	...	...
72	Ye-u ...	3,739	1	0·27	...	...	...	...	...	...	...	...
73	Sagaing ...	14,127	15	1·06	6	0·42	...	...	...	...	...	...
74	Myinmu ...	5,072	11	2·17	...	...	...	...	...	...	...	...
75	Mônýwa ...	10,800	33	3·06	1	0·09	...	...	...	...	...	...
Total of Towns, Burma		1,412,601	3,029	2·14	383	0·27	16	0·01	7	0·00	56	0·04
Towns for which corresponding Rural figures are not given in VI-A.												
1	Bhamo ...	8,011	60	7·49	4	0·50	...	...	...	...	...	...
2	Myitkyina ...	7,328	61	8·32	3	0·41	...	...	...	...	1	0·14
3	Mawlaik ...	2,278	27	11·85	...	...	...	...	...	...	...	...
4	Lashio ...	4,638	177	38·16	...	...	...	...	...	...	...	...
5	Taunggyi ...	8,652	42	4·85	10	1·16	...	...	...	...	...	...
6	Kalaw ...	3,621	16	4·42	...	...	...	...	...	...	1	0·28

NOTE.—Column 4, “ Relapsing Fever ”

Annual Statement VI-B, 1939—contd.

										Dysentery and	
7		8				10		11		12	
Cerebrospinal Fever.		Typhus Fever.		Blackwater Fever.		Other Fevers.		Total Fevers.		Dysentery.	
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
...	2	0.10	8	0.39	229	11.22	18	0.88
...	16	0.69	106	4.56	43	1.85
...	20	3.40	37	6.30	6	1.02
...	13	1.67	40	5.12	10	1.28
...	2	0.22	24	2.59	65	7.01	2	0.22
...	2	0.16	119	9.51	14	1.12
...	17	2.83	2	0.33
...	14	2.10	50	7.51	4	0.60
...	9	1.10	20	2.44	8	0.97
...	3	0.36	57	6.84	...	...
...	2	0.18	19	1.71	12	1.08
...	105	8.18	115	8.96	9	0.70
...	...	2	0.09	...	...	23	1.00	37	1.60	13	0.56
...	...	3	0.02	...	...	43	0.32	436	3.23	76	0.56
...	49	3.77	76	5.85	2	0.15
...	...	1	0.06	...	...	27	1.63	76	4.58	14	0.84
...	1	0.21	...	...	5	1.05	3	0.63
...	19	3.34	20	3.52	3	0.53
...	17	2.31	56	7.62	3	0.41
1	0.11	...	...	...	...	10	1.13	22	2.49	3	0.34
...	2	0.08	21	0.82	9	0.35
...	10	1.23	13	1.60	3	0.37
...	36	3.87	69	7.43	3	0.32
...	...	1	0.06	...	...	21	1.19	82	4.64	8	0.45
...	1	0.17	29	5.01	33	5.71	...	...
1	0.09	...	...	...	...	3	0.27	34	3.01	9	0.80
...	13	3.48	14	3.74	2	0.53
...	21	1.49	42	2.97	12	0.85
...	10	1.97	21	4.14	4	0.79
...	34	3.15	68	6.30	7	0.65
28	0.02	10	0.01	11	0.01	2,104	1.49	5,644	4.00	1,097	0.78
1	0.12	...	...	1	0.12	2	0.25	68	8.49	28	3.50
...	9	1.23	74	10.10	26	3.55
...	1	0.44	10	4.39	38	16.68	1	0.44
1	0.22	...	...	...	...	6	1.29	184	39.67	3	0.65
...	1	0.12	2	0.23	55	6.36	3	0.35
...	17	4.69	3	0.83

(Spirochaetal)—no deaths reported.

STATEMENT VI-B (a).—*Supplement*

No.	Divisions and Towns.	Population (Census 1931).	Diarrhœa.		Respiratory Diseases.							
			13		14		15		16		17	
			Diarrhœa.		Pneumonia.		Pulmonary Tuberculosis.		Whooping cough		Other Respiratory Diseases.	
			Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.
TENASSERIM DIVISION —concl'd.												
46	Mergui ...	20,405	6	0·29	11	0·54	82	4·02	...	...	245	12·01
47	Toungoo ...	23,223	17	0·73	50	2·15	37	1·59	...	...	24	1·03
48	Shwegyin ...	5,876	7	1·19	15	2·55	17	2·89	...	...	3	0·51
49	Pyu ...	7,807	22	2·82	21	2·69	13	1·67	...	...	15	1·92
MAGWE DIVISION.												
50	Thayetmyo ...	9,279	4	0·43	17	1·83	19	2·05	...	...	14	1·51
51	Allanmyo ...	12,511	1	0·08	89	7·11	23	1·84	...	...	8	0·64
52	Minbu ...	6,005	1	0·17	33	5·50	16	2·66	...	...	11	1·83
53	Salin ...	6,654	2	0·30	9	1·35	14	2·10	...	...	7	1·05
54	Magwe ...	8,209	19	2·31	20	2·44	12	1·46	...	...	55	6·70
55	Taungdwingyi ...	8,339	4	0·48	30	3·60	8	0·96	...	...	23	2·76
56	Yenangyaung ...	11,098	16	1·44	90	8·11	32	2·88	...	...	18	1·62
57	Chauk ...	12,830	5	0·39	16	1·25	5	0·39	...	...	4	0·31
58	Pakôkku ...	23,115	25	1·08	92	3·98	30	1·30	...	...	232	10·04
MANDALAY DIVISION.												
59	Mandalay ...	134,950	172	1·27	510	3·78	293	2·17	...	...	395	2·93
60	Mandalay Cantonment	12,982	...	...	23	1·77	13	1·00	...	...	10	0·77
61	Maymyo ...	16,586	35	2·11	85	5·12	28	1·69	...	...	22	1·33
62	Maymyo Cantonment	4,749	9	1·90	17	3·58	3	0·63	...	...	7	1·47
63	Myitngè ...	5,682	1	0·18	14	2·46	...	...	...	...	...	...
64	Kyauksè ...	7,353	7	0·95	12	1·63	9	1·22	...	...	4	0·54
65	Meiktila ...	8,830	13	1·47	49	5·55	7	0·79	...	...	8	0·91
66	Myingyan ...	25,457	22	0·86	106	4·16	34	1·34	...	...	261	10·25
67	Nyaung-u ...	8,118	2	0·25	13	1·60	7	0·86	...	...	6	0·74
68	Yamèthin ...	9,291	2	0·22	18	1·94	16	1·72	...	...	16	1·72
69	Pyinmana ...	17,656	23	1·30	60	3·40	35	1·98	...	...	8	0·45
70	Pyawbwè ...	5,783	6	1·04	3	0·52	5	0·86	...	...	4	0·69
SAGAING DIVISION.												
71	Shwebo ...	11,286	18	1·59	53	4·70	15	1·33	...	...	7	0·62
72	Ye-u ...	3,739	9	2·41	15	4·01	1	0·27	...	...	3	0·80
73	Sagaing ...	14,127	1	0·07	21	1·49	32	2·27	...	...	39	2·76
74	Myinmu ...	5,072	8	1·58	16	3·15	7	1·38	...	...	4	0·79
75	Mônýwa ...	10,800	27	2·50	121	11·20	34	3·15	...	...	14	1·30
Total of Towns, Burma		1,412,601	1,512	1·07	4,461	3·16	2,520	1·78	6	0·00	3,313	2·35
Towns for which corresponding Rural figures are not given in VI-A.												
1	Bhamo ...	8,011	7	0·87	44	5·49	11	1·37	...	...	5	0·62
2	Myitkyina ...	7,328	6	0·82	42	5·73	43	5·87	1	0·14	13	1·77
3	Mawlaik ...	2,278	2	0·88	6	2·63	3	1·32	...	...	13	5·71
4	Lashio ...	4,638	5	1·08	38	8·19	2	0·43	...	...	27	5·82
5	Taunggyi ...	8,652	12	1·39	69	7·98	16	1·85	...	...	6	0·69
6	Kalaw ...	3,621	3	0·83	10	2·76	3	0·83	...	...	3	0·83

NOTE.—Column 19, "Acute Poliomyelitis." and

to Annual Statement VI-B, 1939—contd.

Other Causes.										
18		20		22		23		24		No.
Beri-beri including Epidemic Dropsy.		Diphtheria.		Mumps.		Tuberculosis of Joints.		Other Tuberculous Diseases.		
Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	Death.	Ratio.	
14	0.69	...	...	...	...	...	...	1	0.05	46
5	0.22	...	...	...	...	...	...	10	0.43	47
...	...	...	...	...	...	...	...	1	0.17	48
...	...	...	...	...	...	...	...	5	0.64	49
...	...	...	...	...	...	...	...	...	...	50
2	0.16	...	...	...	...	...	...	...	...	51
...	...	...	...	...	...	...	...	1	0.17	52
...	...	...	...	...	...	...	...	...	...	53
...	...	...	...	...	...	...	...	4	0.49	54
...	...	...	...	...	...	...	...	...	...	55
...	...	...	...	...	...	...	...	...	...	56
...	...	...	...	...	...	...	...	1	0.08	57
...	...	...	...	...	...	...	...	...	...	58
8	0.06	4	0.03	...	...	1	0.01	19	0.14	59
...	...	...	...	...	...	...	...	3	0.23	60
...	...	2	0.12	...	...	...	...	2	0.12	61
...	...	1	0.21	...	...	...	...	1	0.21	62
...	...	...	...	...	...	...	...	...	...	63
6	0.82	...	...	...	...	1	0.14	1	0.14	64
...	...	...	...	...	...	...	...	...	...	65
1	0.04	...	...	...	...	...	...	3	0.12	66
...	...	...	...	...	...	...	...	...	...	67
...	...	...	...	...	...	...	...	...	...	68
3	0.17	...	...	...	...	...	...	1	0.06	69
...	...	...	...	...	...	...	...	...	...	70
1	0.09	...	...	...	...	...	...	...	...	71
...	...	...	...	...	...	...	...	1	0.27	72
...	...	...	...	...	...	...	...	1	0.07	73
...	...	...	...	...	...	1	0.20	...	...	74
...	...	...	...	...	...	...	...	6	0.56	75
243	0.17	32	0.02	1	0.00	14	0.01	232	0.16	
...	...	...	...	...	...	...	...	...	...	1
4	0.55	1	0.14	...	...	...	...	4	0.55	2
11	4.83	...	...	...	...	...	...	1	0.44	3
...	...	...	...	1	0.22	...	...	...	...	4
1	0.12	1	0.12	...	...	...	...	1	0.12	5
...	...	2	0.55	...	...	...	...	...	...	6

Column 21, "Chicken-pox"—no deaths reported.

STATEMENT VI-B (a).—*Supplement to Annual Statement VI-B, 1939*—contd.

No.	Divisions and Towns.	Population (Census 1931).	Other Causes.								Infantile mortality rate per 1,000 births.	
			25		26		27	28				29
			Leprosy.		Cancer.		Deaths from Child-birth.	Deaths under one year.				
			Death.	Ratio.	Death.	Ratio.		Male.	Female.	Total.		
ARAKAN DIVISION.												
1	Akyab ...	38,094	...	...	3	0·08	11	90	78	168	203·64
2	Minbya ...	2,244	...	...	...	...	...	12	6	18	257·14
3	Kyaukpyu ...	4,232	...	...	2	0·47	2	11	10	21	140·00
4	Sandoway ...	4,070	...	...	3	0·74	...	9	11	20	217·39
PEGU DIVISION.												
5	Rangoon ...	398,967	134	0·34	98	0·25	95	1,734	1,374	3,108	270·05	
6	Rangoon Cantonment	1,448	...	...	...	...	...	4	2	6	3,030·00
7	Pegu ...	21,626	2	0·09	3	0·14	13	124	101	225	250·56	
8	Nyaunglebin ...	7,790	...	...	1	0·13	8	73	44	117	392·62
9	Tharrawaddy ...	7,131	2	0·28	2	0·28	5	28	19	47	206·14	
10	Thônzè ...	7,962	1	0·13	...	...	1	45	31	76	260·27
11	Zigôn ...	6,365	3	0·47	...	...	4	31	24	55	294·12
12	Letpadan ...	12,160	3	0·25	2	0·16	5	50	49	99	299·09	
13	Gyobingauk ...	7,675	1	0·13	2	0·26	1	42	47	89	356·00	
14	Minhla ...	4,413	1	0·23	...	...	1	14	15	29	213·24
15	Nattalin ...	5,633	...	...	...	...	4	19	12	31	223·02
16	Syriam ...	15,070	...	...	6	0·40	14	47	52	99	192·23
17	Thôngwa ...	8,976	1	0·11	1	0·11	5	49	37	86	270·44	
18	Insein ...	20,487	2	0·10	3	0·15	6	80	59	139	260·79	
19	Mingaladon Cantonment	3,910	...	...	...	...	1	14	12	26	346·67
20	Thamaing ...	5,645	...	...	...	...	1	50	33	83	506·10
21	Kamayut ...	7,256	1	0·14	1	0·14	2	43	41	84	316·98	
22	Thingangyun ...	7,984	...	...	...	...	2	29	18	47	382·11
23	Kanbe ...	6,575	1	0·15	1	0·15	2	31	35	66	317·31	
24	Prome ...	28,295	5	0·18	8	0·28	13	181	171	352	308·50	
25	Shwedaung ...	8,408	...	...	...	...	2	53	45	98	310·13
26	Paungdè ...	13,479	3	0·22	3	0·22	3	44	29	73	169·77	
IRRAWADDY DIVISION.												
27	Bassein ...	45,662	13	0·28	13	0·28	15	248	209	457	303·25	
28	Ngathainggyaung ...	5,380	...	...	1	0·19	2	32	22	54	276·92
29	Kyônpyaw ...	5,866	3	0·51	3	0·51	1	12	22	34	161·14	
30	Henzada ...	28,542	6	0·21	7	0·25	4	147	134	281	327·51	
31	Myanaung ...	9,072	4	0·44	2	0·22	1	46	39	85	287·16	
32	Kyangin ...	6,780	...	...	...	...	2	26	19	45	264·71
33	Myaungmya ...	7,773	2	0·26	3	0·39	5	50	39	89	278·13	
34	Wakèma ...	9,359	1	0·11	1	0·11	6	50	40	90	332·10	
35	Moulmeingyun ...	7,747	2	0·26	2	0·26	8	53	50	103	375·91	
36	Maubin ...	8,897	...	...	...	...	4	66	50	116	343·20
37	Yandoon ...	9,925	...	...	...	...	...	52	51	103	361·40
38	Danubyu ...	6,334	7	1·11	1	0·16	2	52	18	70	303·03	
39	Pyapôn ...	12,338	...	...	3	0·24	11	62	46	108	276·21
40	Kyaiklat ...	10,658	...	...	2	0·19	3	74	62	136	359·79
TENASSERIM DIVISION.												
41	Thatôn ...	16,851	5	0·30	3	0·18	1	71	58	129	178·67	
42	Kyaikto ...	6,611	1	0·15	1	0·15	2	29	18	47	271·68	
43	Moulmein ...	65,506	18	0·27	12	0·18	33	259	201	460	225·71	
44	Kawkareik ...	6,575	...	...	1	0·15	3	56	54	110	349·21
45	Tavoy ...	29,018	...	...	2	0·07	6	116	115	231	211·73

STATEMENT VI-B (a).—Supplement to Annual Statement VI-B, 1939—concl'd.

No.	Divisions and Towns.	Population (Census 1931).	Other Causes.								Infantile mortality rate per 1,000 births.
			25		26		27	28			
			Leprosy.		Cancer.		Deaths from Child-birth.	Deaths under one year.			
			Death.	Ratio.	Death.	Ratio.		Male.	Female.	Total.	
TENASSERIM DIVISION —concl'd.											
46	Mergui ...	20,405	...	...	4	0·20	13	121	123	244	318·54
47	Toungoo ...	23,223	...	...	3	0·13	4	38	42	80	106·38
48	Shwegyin ...	5,876	...	...	4	0·68	1	24	22	46	205·36
49	Pyu ...	7,807	1	0·13	4	0·51	2	40	35	75	233·64
MAGWE DIVISION.											
50	Thayetmyo ...	9,279	2	0·22	...	...	8	40	42	82	236·31
51	Allanmyo ...	12,511	2	0·16	2	0·16	3	59	60	119	278·04
52	Minbu ...	6,005	1	0·17	3	0·50	2	31	24	55	241·23
53	Salin ...	6,654	3	0·45	1	0·15	5	36	36	72	347·83
54	Magwe ...	8,209	2	0·24	1	0·12	3	49	57	106	336·51
55	Taungdwingyi ...	8,339	1	0·12	5	0·60	1	128	111	239	526·43
56	Yenangyaung ...	11,098	6	0·54	1	0·09	9	92	63	155	315·68
57	Chauk ...	12,830	...	...	1	0·08	2	66	65	131	286·03
58	Pakôkku ...	23,115	21	0·91	...	...	21	204	179	383	473·42
MANDALAY DIVISION.											
59	Mandalay ...	134,950	76	0·56	4	0·03	51	891	758	1,649	214·60
60	Mandalay Cantonment	12,982	1	0·08	...	...	6	72	56	128	389·06
61	Maymyo ...	16,586	...	...	4	0·24	4	85	68	153	188·89
62	Maymyo Cantonment	4,749	...	...	...	...	...	27	15	42	198·11
63	Myitngè ...	5,682	...	...	...	...	...	19	16	35	250·00
64	Kyauksè ...	7,353	...	...	1	0·14	2	51	55	106	318·32
65	Meiktila ...	8,830	...	...	...	...	5	61	46	107	317·51
66	Myingyan ...	25,457	5	0·20	...	...	30	233	212	445	394·50
67	Nyaung-u ...	8,118	6	0·74	1	0·12	6	59	46	105	371·02
68	Yamèthin ...	9,291	5	0·54	1	0·11	7	55	41	96	229·12
69	Pyinmana ...	17,656	1	0·06	2	0·11	7	108	88	196	269·60
70	Pyawbwè ...	5,783	2	0·35	1	0·17	1	40	36	76	340·81
SAGAING DIVISION.											
71	Shwebo ...	11,286	1	0·09	1	0·09	9	94	62	156	315·15
72	Ye-u ...	3,739	2	0·53	...	...	2	39	15	54	364·86
73	Sagaing ...	14,127	...	...	...	...	6	80	59	139	263·76
74	Myinmu ...	5,072	3	0·59	1	0·20	2	29	47	76	342·34
75	Mònywa ...	10,800	2	0·19	1	0·09	9	86	74	160	347·83
Total of Towns, Burma		1,412,601	365	0·26	242	0·17	531	7,365	6,155	13,520	271·29
Towns for which corresponding Rural figures are not given in VI-A.											
1	Bhamo ...	8,011	...	...	1	0·12	8	32	29	61	220·22
2	Myitkyina ...	7,328	1	0·14	...	...	8	27	24	51	172·30
3	Mawlaik ...	2,278	...	...	1	0·44	1	9	15	24	187·50
4	Lashio ...	4,638	1	0·22	1	0·22	...	31	27	58	218·05
5	Taunggyi ...	8,652	2	0·23	1	0·12	2	32	24	56	128·74
6	Kalaw ...	3,621	...	...	...	...	...	4	5	9	73·17

ANNUAL STATEMENT NO. VII.—Deaths registered from Cholera in the Dis

1	2	3		4							
		Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from cholera were reported.	Number in each district.	Number from which deaths from cholera were reported.						
No.	Divisions and Districts.										
ARAKAN DIVISION.											
1	Akyab ...	10	9	671	32	...	...	3	6	18	19
2	Kyaukpyu ...	6	...	265	...	...	...	...	...	...	...
3	Sandoway ...	5	...	151	...	...	...	...	...	...	...
PEGU DIVISION.											
4	Rangoon ...	2	1	2	1	...	...	...	2	6	3
5	Pegu ...	19	6	410	21	29	9	11	2	2	...
6	Tharrawaddy ...	14	12	452	91	...	...	...	...	2	2
7	Hanthawaddy ...	9	5	459	11	...	...	1	4	5	2
8	Insein ...	10	2	312	2	...	...	...	2	2	1
9	Prome ...	9	5	332	7	...	...	...	...	...	6
IRRAWADDY DIVISION.											
10	Bassein ...	14	9	571	26	...	...	...	2	11	17
11	Henzada ...	9	7	417	57	...	1	...	44	84	11
12	Myaungmya ...	8	5	517	9	...	3	1	...	15	2
13	Maubin ...	7	7	243	88	...	...	...	15	34	5
14	Pyapôn ...	6	5	315	28	...	1	1	41	36	...
TENASSERIM DIVISION.											
15	Thatôn ...	8	4	373	11	...	1	...	...	3	6
16	Amherst ...	10	2	334	2	...	...	...	...	3	2
17	Tavoy ...	6	...	170	...	...	...	...	...	...	...
18	Mergui ...	6	...	139	...	...	...	...	...	...	...
19	Toungoo ...	11	3	504	9	12	1	1	...	...	...
MAGWE DIVISION.											
20	Thayetmyo ...	8	2	501	2	...	...	...	...	...	...
21	Minbu ...	11	...	328	...	...	...	...	...	...	...
22	Magwe ...	10	1	428	1	...	...	...	...	...	1
23	Pakôkku ...	9	3	619	4	1	...	3	2	...	...
MANDALAY DIVISION.											
24	Mandalay ...	11	1	291	1	...	...	...	...	...	1
25	Kyauksè ...	5	...	249	...	...	...	...	...	...	...
26	Meiktila ...	5	...	297	...	...	...	...	...	...	...
27	Myingyan ...	9	1	450	1	...	...	...	...	...	...
28	Yamèthin ...	12	...	381	...	...	...	...	...	...	...
SAGAING DIVISION.											
29	Shwebo ...	10	...	468	...	...	...	...	...	...	...
30	Sagaing ...	8	4	293	9	...	...	...	...	4	5
31	Lower Chindwin ...	8	...	319	...	...	...	...	...	...	...
Total ...		275	94	11,261	413	42	16	21	120	225	83

istricts of Burma during each month of the year 1939.

5						6			7			8	1
July.	August.	Septeniber.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Males.	Females.	Total.	Males.	Females.	Total.		
9	1	...	38	18	56	0.11	0.06	0.09	0.17	1
...	0.23	2
...	0.02	3
...	11	...	11	0.04	...	0.03	0.06	4
...	38	15	53	0.15	0.06	0.11	0.12	5
2	2	7	52	105	318	265	225	490	1.05	0.88	0.97	0.03	6
...	1	10	3	13	0.05	0.02	0.03	0.16	7
1	2	4	4	8	0.02	0.03	0.02	0.10	8
1	68	42	33	75	0.21	0.16	0.18	0.10	9
38	1	...	...	...	...	40	29	69	0.14	0.10	0.12	0.36	10
64	54	20	2	5	56	195	146	341	0.64	0.47	0.55	0.16	11
2	3	...	...	...	...	24	2	26	0.10	0.01	0.06	0.53	12
8	4	35	31	36	18	105	81	186	0.56	0.44	0.50	0.54	13
...	56	23	79	0.31	0.15	0.24	0.70	14
3	8	5	13	0.03	0.02	0.02	0.28	15
...	3	2	5	0.01	0.01	0.01	0.27	16
...	0.55	17
...	1.47	18
...	7	7	14	0.03	0.03	0.03	0.21	19
...	9	1	...	6	4	10	0.04	0.03	0.04	0.18	20
...	0.01	21
...	1	...	1	0.00	...	0.00	0.25	22
...	6	...	6	0.02	...	0.01	0.41	23
...	1	1	...	0.01	0.00	0.01	24
...	0.00	25
...	0.00	26
1	1	...	1	0.00	...	0.06	0.04	27
...	0.01	28
...	0.00	29
1	8	2	10	0.05	0.01	0.03	0.07	30
...	0.07	31
130	64	62	94	148	463	868	600	1,468	0.14	0.10	0.12	0.21	

ANNUAL STATEMENT NO. VIII.—Deaths registered from Small-pox in the

1	2	3		4		5						
No.	Divisions and Districts.	Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.	July.
		Number in each district.	Number from which deaths from small-pox were reported.	Number in each district.	Number from which deaths from small-pox were reported.							
ARAKAN DIVISION.												
1	Akyab ...	10	3	671	5	19	1	3	...	...	...	...
2	Kyaukpyu ...	6	...	265	...	...	...	...	...	...	...	...
3	Sandoway ...	5	...	151	...	...	...	...	...	...	...	...
PEGU DIVISION.												
4	Rangoon ...	2	1	2	1	5	2	4	5	7	5	3
5	Pegu ...	19	...	410	...	...	...	...	...	...	...	...
6	Tharrawaddy ...	14	2	452	2	...	1	...	2	3	...	...
7	Hanthawaddy ...	9	4	459	4	...	...	...	...	1	1	...
8	Insein ...	10	5	312	7	...	2	3	1	...	1	1
9	Proine ...	9	...	332	...	...	...	...	...	...	...	...
IRRAWADDY DIVISION.												
10	Bassein ...	14	1	571	1	...	...	...	...	...	...	...
11	Henzada ...	9	1	417	1	...	...	1	...	...	...	2
12	Myaungmya ...	8	1	517	1	...	...	...	...	1	...	...
13	Maubin ...	7	1	243	3	...	...	...	...	...	...	1
14	Pyapôn ...	6	1	315	1	1	...	...	...	...	...	...
TENASSERIM DIVISION.												
15	Thatôn ...	8	...	373	...	...	...	...	...	...	...	...
16	Amherst ...	10	1	334	1	...	...	...	...	...	...	...
17	Tavoy ...	6	...	170	...	...	...	...	...	...	...	...
18	Mergui ...	6	...	139	...	...	...	...	...	...	...	...
19	Toungoo ...	11	...	504	...	...	...	...	...	...	...	...
MAGWE DIVISION.												
20	Thayetmyo ...	8	...	501	...	...	...	...	...	...	...	...
21	Minbu ...	11	...	328	...	...	...	...	...	...	...	...
22	Magwe ...	10	...	428	...	...	...	...	...	...	...	...
23	Pakôkku ...	9	...	619	...	...	...	...	...	...	...	...
MANDALAY DIVISION.												
24	Mandalay ...	11	...	291	...	...	...	...	...	...	...	...
25	Kyauksè ...	5	...	249	...	...	...	...	...	...	...	...
26	Meiktila ...	5	...	297	...	...	...	...	...	...	...	...
27	Myingyan ...	9	...	450	...	...	...	...	...	...	...	...
28	Yamèthin ...	12	...	381	...	...	...	...	...	...	...	...
SAGAING DIVISION.												
29	Shwebo ...	10	...	468	...	...	...	...	...	...	...	...
30	Sagaing ...	8	...	293	...	...	...	...	...	...	...	...
31	Lower Chindwin ...	8	...	319	...	...	...	...	...	...	...	...
Total ...		275	21	11,261	27	25	6	11	8	12	7	7

Districts of Burma during each month of the year 1939.

					6			7		8			9	1
August.	September.	October.	November.	December.	Total.			Number of these deaths among children		Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
					Males.	Females.	Total.	Under 1 year.	One and under 10 years.	Males.	Females.	Total.		
...	1	3	14	13	27	...	3	0·04	0·04	0·04	0·11	1
...	0·03	2
...	0·06	3
10	7	9	4	7	32	36	68	7	13	0·12	0·28	0·17	0·18	4
...	0·06	5
...	2	4	6	...	...	0·01	0·02	0·01	0·04	6
...	2	2	2	4	...	...	0·01	0·01	0·01	0·04	7
...	...	1	1	...	5	5	10	...	2	0·03	0·03	0·03	0·06	8
...	0·04	9
...	...	1	...	...	1	...	1	...	...	0·00	...	0·00	0·05	10
...	2	1	3	1	1	0·01	0·00	0·00	0·11	11
...	1	...	1	...	...	0·00	...	0·00	0·02	12
2	3	...	3	...	...	0·02	...	0·01	0·04	13
...	1	...	1	...	...	0·01	...	0·00	0·07	14
...	0·14	15
...	1	...	1	...	1	...	...	0·00	...	0·00	0·18	16
...	0·02	17
...	0·54	18
...	0·14	19
...	0·04	20
...	0·05	21
...	0·06	22
...	0·14	23
...	0·33	24
...	0·08	25
...	0·07	26
...	0·15	27
...	0·01	28
...	0·10	29
...	0·15	30
...	0·03	31
12	7	11	7	12	64	61	125	8	19	0·01	0·01	0·01	0·10	

ANNUAL STATEMENT NO. IX.—Deaths registered from Fevers in the

1	2	3		4							
No.	Divisions and Districts.	Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.						
ARAKAN DIVISION.											
1	Akyab ...	10	10	671	671	804	560	596	572	604	713.
2	Kyaukpyu ...	6	6	265	248	211	138	125	114	120	125
3	Sandoway ...	5	5	151	151	160	83	119	89	84	70.
PEGU DIVISION.											
4	Rangoon ...	2	2	2	2	31	24	18	18	17	12
5	Pegu ...	19	19	410	397	223	125	213	247	159	286.
6	Tharrawaddy ...	14	14	452	452	587	450	387	345	290	369
7	Hanthawaddy ...	9	9	459	352	152	121	108	132	149	164
8	Insein ...	10	10	312	162	233	187	196	200	151	178
9	Prome ...	9	9	332	332	896	578	635	335	269	337
IRRAWADDY DIVISION.											
10	Bassein ...	14	14	571	554	326	241	245	294	245	292
11	Henzada ...	9	9	417	323	706	488	418	432	414	485
12	Myaungmya ...	8	8	517	517	238	135	120	226	154	174.
13	Maubin ...	7	7	243	243	284	222	128	325	271	282
14	Pyapôn ...	6	6	315	315	221	149	174	228	168	195.
TENASSERIM DIVISION.											
15	Thatôn ...	8	8	373	322	617	327	333	346	403	514
16	Amherst ...	10	10	334	334	207	165	144	117	131	213
17	Tavoy ...	6	6	170	170	265	205	200	202	197	218.
18	Mergui ...	6	6	139	121	116	83	173	99	117	152
19	Toungoo ...	11	11	504	504	377	265	238	270	207	275.
MAGWE DIVISION.											
20	Thayetmyo ...	8	8	501	501	477	236	364	247	134	218
21	Minbu ...	11	11	328	328	585	305	282	313	200	206.
22	Magwe ...	10	10	428	428	646	507	520	517	305	476.
23	Pakôkku ...	9	9	619	595	598	451	484	492	380	387
MANDALAY DIVISION.											
24	Mandalay ...	11	11	291	291	178	195	207	202	196	180
25	Kyauksè ...	5	4	249	249	271	147	143	132	163	126
26	Meiktila ...	5	5	297	297	259	112	106	257	139	97
27	Myingyan ...	9	9	450	208	145	90	140	116	59	75.
28	Yamèthin ...	12	12	381	379	621	397	335	334	211	258.
SAGAING DIVISION.											
29	Shwebo ...	10	10	468	468	723	514	534	525	474	525.
30	Sagaing ...	8	8	293	293	443	291	265	249	225	250..
31	Lower Chindwin ...	8	8	319	317	480	316	365	364	254	295
Total ...		275	274	11,261	10,524	12,080	8,107	8,315	8,339	6,890	8,147

Districts of Burma during each month of the year 1939.

5						6			7			8	1
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Males.	Females.	Total.	Males.	Females.	Total.		
978	808	707	736	648	845	4,483	4,088	8,571	13·24	13·77	13·49	12·73	1
232	173	155	110	92	119	903	811	1,714	8·38	7·20	7·78	7·31	2
137	124	111	95	75	104	649	602	1,251	10·11	9·26	9·68	12·09	3
12	23	9	19	27	23	178	55	233	0·66	0·43	0·58	0·53	4
274	251	223	299	241	294	1,641	1,194	2,835	6·46	5·06	5·79	5·21	5
608	379	377	389	388	726	2,803	2,492	5,295	11·15	9·79	10·47	8·65	6
183	135	125	198	197	209	1,088	785	1,873	4·97	4·13	4·58	5·04	7
180	176	156	156	164	238	1,258	957	2,215	7·17	6·14	6·68	6·66	8
447	353	417	582	832	1,131	3,512	3,300	6,812	17·29	15·91	16·59	12·21	9
544	324	329	385	303	309	2,053	1,784	3,837	7·03	6·39	6·72	6·64	10
635	509	503	508	534	768	3,287	3,113	6,400	10·78	10·02	10·39	7·67	11
336	208	187	269	231	240	1,415	1,103	2,518	6·00	5·27	5·66	6·25	12
452	394	438	484	357	356	2,165	1,828	3,993	11·47	10·00	10·75	9·98	13
184	186	197	199	251	340	1,384	1,108	2,492	7·71	7·17	7·46	6·94	14
875	452	329	883	392	491	3,120	2,842	5,962	11·35	11·03	11·19	9·46	15
164	156	162	126	156	207	1,097	851	1,948	4·05	3·47	3·77	4·50	16
252	231	194	277	239	205	1,404	1,281	2,685	15·16	14·67	14·92	16·39	17
128	115	129	183	124	147	804	762	1,566	9·43	9·93	9·67	11·06	18
342	295	286	247	318	320	1,899	1,541	3,440	8·63	7·38	8·02	8·77	19
267	282	373	308	357	1,486	2,385	2,364	4,749	17·59	17·05	17·32	11·72	20
322	294	350	313	367	695	2,132	2,100	4,232	15·60	14·87	15·23	14·34	21
709	692	508	625	732	1,255	3,753	3,739	7,492	14·97	15·03	15·00	10·76	22
578	548	514	625	510	626	3,154	3,039	6,193	13·08	11·78	12·41	11·31	23
190	202	210	265	323	298	1,435	1,211	2,646	7·48	6·73	7·12	7·48	24
151	129	131	261	396	547	1,311	1,286	2,597	17·51	16·82	17·16	12·93	25
176	92	105	212	188	332	1,113	962	2,075	7·56	5·91	6·69	5·68	26
110	147	88	156	193	271	818	772	1,590	3·58	3·17	3·36	2·86	27
412	341	282	345	519	1,168	2,693	2,530	5,223	13·86	12·88	13·36	9·48	28
659	537	599	826	1,241	1,689	4,487	4,359	8,846	20·95	18·74	19·80	16·68	29
268	284	317	351	400	636	2,017	1,962	3,979	12·62	11·14	11·84	8·93	30
428	509	539	522	643	927	2,762	2,880	5,642	15·47	14·06	14·71	10·38	31
11,233	9,349	9,050	10,954	11,438	17,002	63,203	57,701	120,904	10·22	9·75	9·99	8·68	

ANNUAL STATEMENT NO. X.—Deaths registered from Dysentery and

1	2	3		4							
No.	Divisions and Districts.	Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.	Number in each district.	Number from which deaths from dysentery and diarrhoea were reported.						
	ARAKAN DIVISION.										
1	Akyab ...	10	10	671	161	47	26	32	56	47	97
2	Kyaukpyu ...	6	6	265	38	5	6	3	7	7	30
3	Sandoway ...	5	2	151	14	...	1	1	...	1	...
	PEGU DIVISION.										
4	Rangoon ...	2	2	2	2	71	38	48	42	58	94
5	Pegu ...	19	19	410	49	10	6	6	7	8	14
6	Tharrawaddy ...	14	14	452	86	18	9	8	10	16	31
7	Hanthawaddy ...	9	8	459	26	10	1	1	6	7	5
8	Insein ...	10	10	312	51	7	9	4	7	23	26
9	Prome ...	9	8	332	42	10	10	15	12	20	12
	IRRAWADDY DIVISION.										
10	Bassein ...	14	13	571	184	21	11	19	18	32	57
11	Henzada ...	9	9	417	53	13	5	3	15	20	29
12	Myaungmya ...	8	8	517	101	21	10	13	22	20	16
13	Maubin ...	7	7	243	83	7	3	1	3	9	12
14	Pyapôn ...	6	6	315	89	20	21	24	25	22	25
	TENASSERIM DIVISION.										
15	Thatôn ...	8	7	373	57	7	5	6	8	14	23
16	Amherst ...	10	10	334	69	17	20	26	13	16	39
17	Tavoy ...	6	5	170	26	5	7	4	3	3	3
18	Mergui ...	6	6	139	41	4	10	7	7	2	10
19	Toungoo ...	11	11	504	38	14	10	3	9	10	27
	MAGWE DIVISION.										
20	Thayetmyo ...	8	7	501	60	2	4	3	4	1	4
21	Minbu ...	11	11	328	45	7	4	9	4	2	2
22	Magwe ...	10	7	428	43	7	4	9	7	10	8
23	Pakôkku ...	9	8	619	98	11	17	12	28	12	31
	MANDALAY DIVISION.										
24	Mandalay ...	11	7	291	17	28	17	25	23	29	27
25	Kyauksè ...	5	4	249	151	16	11	11	14	13	9
26	Meiktila ...	5	5	297	60	12	8	4	5	7	29
27	Myingyan ...	9	7	450	14	9	4	7	7	4	14
28	Yamèthin ...	12	10	381	93	7	1	2	11	1	9
	SAGAING DIVISION.										
29	Shwebo ...	10	10	468	31	10	5	5	10	6	12
30	Sagaing ...	8	8	293	100	10	15	6	7	9	7
31	Lower Chindwin ...	8	8	319	91	4	10	11	12	15	22
	Total ...	275	253	11,261	2,013	430	308	328	402	444	724

Diarrhæa in the Districts of Burma during each month of the year 1939.

5						6			7			8	1
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Males.	Females.	Total.	Males.	Females.	Total.		
94	129	111	69	50	43	473	328	801	1·40	1·10	1·26	0·61	1
32	21	13	6	6	4	82	58	140	0·76	0·52	0·64	0·58	2
8	8	...	...	...	1	7	13	20	0·11	0·20	0·15	0·31	3
92	57	46	49	55	78	451	277	728	1·66	2·14	1·82	1·47	4
19	20	19	11	14	12	95	51	146	0·37	0·22	0·30	0·16	5
48	25	14	9	13	13	132	82	214	0·53	0·32	0·42	0·45	6
7	5	1	6	9	6	40	24	64	0·18	0·13	0·16	0·27	7
29	17	8	9	9	13	88	73	161	0·50	0·47	0·49	0·34	8
26	17	12	13	13	15	105	70	175	0·52	0·34	0·43	0·50	9
89	34	27	33	23	17	217	164	381	0·74	0·59	0·67	0·74	10
66	56	42	14	13	26	160	142	302	0·52	0·46	0·49	0·56	11
30	18	10	16	18	14	124	84	208	0·53	0·40	0·47	0·49	12
18	14	17	...	23	24	85	46	131	0·45	0·25	0·35	0·27	13
26	25	25	27	27	35	166	136	302	0·92	0·88	0·90	1·20	14
26	11	4	4	6	5	71	48	119	0·26	0·19	0·22	0·22	15
34	23	33	15	30	19	165	120	285	0·61	0·49	0·55	0·53	16
9	4	7	10	13	8	51	25	76	0·55	0·29	0·42	1·07	17
14	...	9	11	4	6	46	38	84	0·54	0·50	0·52	1·48	18
44	29	16	9	13	6	108	82	190	0·49	0·39	0·44	0·48	19
1	11	5	2	...	6	21	22	43	0·15	0·16	0·16	0·42	20
1	10	14	5	2	2	37	25	62	0·27	0·18	0·22	0·33	21
16	15	19	14	4	14	62	65	127	0·25	0·26	0·25	0·22	22
40	21	15	19	9	11	122	104	226	0·51	0·40	0·45	0·56	23
42	24	24	28	36	26	174	155	329	0·91	0·86	0·89	0·87	24
11	13	7	15	20	20	84	76	160	1·12	1·00	1·06	0·71	25
46	23	23	26	5	5	103	90	193	0·70	0·55	0·62	0·24	26
11	5	15	7	6	4	59	34	93	0·26	0·14	0·20	0·21	27
29	37	17	5	7	11	79	58	137	0·41	0·30	0·35	0·25	28
34	51	23	8	9	12	97	88	185	0·45	0·38	0·41	0·27	29
21	26	10	19	8	13	97	54	151	0·61	0·31	0·45	0·34	30
36	31	16	16	15	10	89	109	198	0·50	0·53	0·52	0·56	31
999	780	602	475	460	479	3,690	2,741	6,431	0·60	0·46	0·53	0·51	

ANNUAL STATEMENT NO. XI.—Deaths registered from Respiratory

No.	Divisions and Districts.	3		4							
		Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from respiratory diseases were reported.	Number in each district.	Number from which deaths from respiratory diseases were reported.						
ARAKAN DIVISION.											
1	Akyab ...	10	8	671	112	45	41	30	30	30	31
2	Kyaukpyu ...	6	4	265	12	12	2	5	3	5	...
3	Sandoway ...	5	2	151	5	4	2	4	1	2	3
PEGU DIVISION.											
4	Rangoon ...	2	2	2	2	315	261	244	238	234	268
5	Pegu ...	19	4	410	4	20	12	13	19	15	24
6	Tharrawaddy ...	14	14	452	70	23	29	29	25	20	22
7	Hanthawaddy ...	9	5	459	14	9	13	7	12	11	7
8	Insein ...	10	9	312	31	22	15	19	19	15	17
9	Prome ...	9	5	332	5	39	27	39	20	17	25
IRRAWADDY DIVISION.											
10	Bassein ...	14	11	571	49	42	30	33	30	33	35
11	Henzada ...	9	7	417	43	13	14	16	13	20	10
12	Myaungmya ...	8	8	517	52	14	20	15	11	17	28
13	Maubin ...	7	6	243	23	22	20	14	9	13	12
14	Pyapôn ...	6	6	315	59	23	20	19	19	31	15
TENASSERIM DIVISION.											
15	Thatôn ...	8	3	373	5	7	9	8	5	10	13
16	Amherst ...	10	10	334	100	65	52	49	44	45	45
17	Tavoy ...	6	2	170	12	15	13	17	14	18	12
18	Mergui ...	6	5	139	19	40	40	42	30	25	20
19	Toungoo ...	11	11	504	21	13	17	13	15	10	14
MAGWE DIVISION.											
20	Thayetmyo ...	8	4	501	12	20	16	7	15	8	14
21	Minbu ...	11	9	328	59	22	23	25	12	11	9
22	Magwe ...	10	6	428	8	19	27	26	25	23	19
23	Pakôkku ...	9	5	619	9	17	31	27	25	20	21
MANDALAY DIVISION.											
24	Mandalay ...	11	9	291	14	140	115	109	121	83	95
25	Kyauksè ...	5	4	249	134	13	15	9	14	19	4
26	Meiktila ...	5	5	297	8	5	6	5	6	4	5
27	Myingyan ...	9	5	450	11	44	71	49	45	31	26
28	Yamèthin ...	12	9	381	33	23	14	23	15	16	15
SAGAING DIVISION.											
29	Shwebo ...	10	7	468	8	4	6	6	9	3	7
30	Sagaing ...	8	7	293	14	20	14	8	12	10	10
31	Lower Chindwin ...	8	8	319	215	141	108	106	96	95	131
Total ...		275	200	11,261	1,163	1,211	1,083	1,016	952	894	957

Diseases in the Districts of Burma during each month of the year 1939.

5						6			7			8	9
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Males.	Females.	Total.	Males.	Females.	Total.		
61	48	39	36	39	33	307	156	463	0·91	0·53	0·73	1·03	1
2	10	7	5	4	8	38	25	63	0·35	0·22	0·29	0·22	2
2	4	7	3	1	4	25	12	37	0·39	0·18	0·29	0·29	3
260	258	292	265	280	365	2,055	1,225	3,280	7·58	9·47	8·19	8·60	4
30	22	16	16	19	19	131	94	225	0·52	0·40	0·46	0·46	5
31	26	26	24	25	28	171	137	308	0·68	0·54	0·61	0·64	6
9	18	9	13	10	11	84	45	129	0·38	0·24	0·32	0·48	7
14	21	22	21	16	32	154	79	233	0·88	0·51	0·70	0·66	8
37	36	33	31	31	50	215	170	385	1·06	0·82	0·94	0·78	9
33	24	35	40	49	40	262	162	424	0·90	0·58	0·74	1·00	10
19	13	23	24	33	32	116	114	230	0·38	0·37	0·37	0·49	11
9	10	15	26	24	28	154	63	217	0·65	0·30	0·49	0·56	12
7	12	7	16	21	20	82	91	173	0·43	0·50	0·47	0·50	13
18	25	22	26	44	28	151	139	290	0·84	0·90	0·87	1·03	14
14	11	14	11	19	13	82	52	134	0·30	0·20	0·25	0·36	15
47	44	57	35	45	56	341	243	584	1·26	0·99	1·13	1·32	16
19	21	17	16	16	20	124	74	198	1·34	0·85	1·10	1·06	17
23	31	28	39	43	14	192	183	375	2·25	2·39	2·32	0·88	18
27	17	29	20	22	29	136	90	226	0·62	0·43	0·53	0·45	19
16	22	16	12	16	18	96	84	180	0·71	0·61	0·66	0·63	20
6	13	11	10	11	11	96	68	164	0·70	0·48	0·59	0·52	21
25	27	21	32	37	36	169	148	317	0·67	0·59	0·63	0·63	22
32	32	26	45	35	52	202	161	363	0·84	0·62	0·73	0·56	23
122	84	131	118	136	176	865	565	1,430	4·51	3·14	3·85	3·71	24
11	12	8	9	14	30	88	70	158	1·18	0·92	1·04	0·73	25
11	10	7	6	5	6	41	35	76	0·28	0·21	0·25	0·22	26
45	48	30	31	29	28	260	217	477	1·14	0·89	1·01	0·75	27
15	13	10	23	12	22	129	72	201	0·66	0·37	0·51	0·77	28
3	22	14	12	18	19	68	55	123	0·32	0·24	0·28	0·18	29
5	10	16	13	9	10	67	70	137	0·42	0·40	0·41	0·53	30
158	190	181	192	152	142	880	812	1,692	4·93	3·96	4·41	3·92	31
1,111	1,134	1,169	1,170	1,215	1,380	7,781	5,511	13,292	1·26	0·93	1·10	1·11	

ANNUAL STATEMENT NO. XII.—Deaths registered from Plague in the

1	2	3		4							
No.	Divisions and Districts.	Circles of Registration.		Village-tracts.		January.	February.	March.	April.	May.	June.
		Number in each district.	Number from which deaths from plague were reported.	Number in each district.	Number from which deaths from plague were reported.						
ARAKAN DIVISION.											
1	Akyab ...	10	...	671	...	...	...	...	...	...	...
2	Kyaukpyu ...	6	...	265	...	...	...	...	...	...	...
3	Sandoway ...	5	...	151	...	...	...	...	...	...	...
PEGU DIVISION.											
4	Rangoon ...	2	1	2	1	2	...	...	...	...	1
5	Pegu ...	19	4	410	12	3	...	...	1	1	35
6	Tharrawaddy ...	14	6	452	6	3	15	9	6	1	1
7	Hanthawaddy ...	9	...	459	...	...	...	...	...	...	...
8	Insein ...	10	2	312	3	...	2	4	...	...	...
9	Prome ...	9	5	332	9	5	10	7	1	...	...
IRRAWADDY DIVISION.											
10	Bassein ...	14	5	571	7	3	8	11	4	...	2
11	Henzada ...	9	2	417	3	...	2	1	...	...	...
12	Myaungmya ...	8	4	517	4	...	...	...	1	1	5
13	Maubin ...	7	1	243	1	...	...	...	...	...	2
14	Pyapôn ...	6	...	315	...	...	...	...	...	...	...
TENASSERIM DIVISION.											
15	Thatôn ...	8	1	373	1	1	1	...	1	...	3
16	Amherst ...	10	...	334	...	...	...	...	...	...	...
17	Tavoy ...	6	...	170	...	...	...	...	...	...	...
18	Mergui ...	6	...	139	...	...	...	...	...	...	...
19	Toungoo ...	11	5	504	5	...	1	...	1	...	...
MAGWE DIVISION.											
20	Thayetmyo ...	8	4	501	6	13	27	13	...	...	...
21	Minbu ...	11	6	328	18	22	21	5	...	...	...
22	Magwe ...	10	4	428	5	38	29	3	...	...	...
23	Pakôkku ...	9	5	619	19	69	58	12	2	...	...
MANDALAY DIVISION.											
24	Mandalay ...	11	6	291	6	75	62	38	13	...	...
25	Kyauksè ...	5	2	249	31	15	17	1	...	...	...
26	Meiktila ...	5	5	297	157	370	194	85	23	...	2
27	Myingyan ...	9	7	450	26	239	280	133	5	...	...
28	Yamèthin ...	12	9	381	54	122	58	4	...	1	...
SAGAING DIVISION.											
29	Shwebo ...	10	4	468	19	32	28	18	5	...	...
30	Sagaing ...	8	7	293	52	221	130	42	24	...	...
31	Lower Chindwin ...	8	4	319	8	6	23	10	...	...	...
Total ...		275	99	11,261	453	1,239	966	396	87	4	51

Districts of Burma during each month of the year 1939.

5						6			7			8	1
July.	August.	September.	October.	November.	December.	Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 of previous five years.	No.
						Males.	Females.	Total.	Males.	Females.	Total.		
...	...	...	...	...	...	...	...	...	...	...	...	...	1
...	...	...	...	...	...	...	...	...	...	...	...	0'00	2
...	...	...	...	...	...	...	...	...	...	...	...	...	3
...	1	...	1	1	...	5	1	6	0'02	0'01	0'01	0'04	4
15	5	...	2	...	...	34	28	62	0'13	0'12	0'13	0'09	5
2	3	1	...	...	...	27	14	41	0'11	0'06	0'08	0'19	6
...	...	...	...	...	...	...	...	...	...	...	...	0'01	7
...	...	1	1	...	1	7	2	9	0'04	0'01	0'03	0'05	8
4	14	21	...	1	...	35	28	63	0'17	0'13	0'15	0'05	9
...
15	4	3	1	...	...	22	29	51	0'08	0'10	0'09	0'11	10
...	...	...	...	...	...	2	1	3	0'01	0'00	0'00	0'06	11
4	...	...	...	...	...	8	3	11	0'03	0'01	0'02	0'02	12
10	4	...	...	...	...	11	5	16	0'06	0'03	0'04	0'03	13
...	...	...	...	...	...	...	...	...	...	...	...	0'00	14
...
2	1	4	2	...	5	10	10	20	0'04	0'04	0'04	0'21	15
...	...	...	...	...	...	...	...	...	...	...	...	0'01	16
...	...	...	...	...	...	...	...	...	...	...	...	...	17
...	...	...	...	...	...	...	...	...	...	...	...	0'00	18
2	2	...	...	...	...	3	3	6	0'01	0'01	0'01	0'11	19
...
...	...	...	13	...	...	39	27	66	0'29	0'19	0'24	0'02	20
...	...	1	...	...	...	25	24	49	0'18	0'17	0'18	0'10	21
...	...	...	1	3	4	45	33	78	0'18	0'13	0'16	0'26	22
...	...	...	...	1	...	75	67	142	0'31	0'26	0'28	0'26	23
...
...	1	1	4	1	24	113	106	219	0'59	0'59	0'59	1'52	24
...	...	...	...	...	...	19	14	33	0'25	0'18	0'22	0'11	25
...	11	1	23	37	44	374	416	790	2'54	2'55	2'55	1'40	26
...	...	...	...	11	9	353	324	677	1'54	1'33	1'43	0'45	27
...	2	...	...	2	2	96	95	191	0'49	0'48	0'49	0'37	28
...
14	24	29	31	41	36	131	127	258	0'61	0'55	0'58	0'13	29
3	...	...	5	...	...	198	227	425	1'24	1'29	1'27	0'57	30
...	...	...	...	...	11	19	31	50	0'11	0'15	0'13	0'02	31
71	72	62	84	98	136	1,651	1,615	3,266	0'27	0'27	0'27	0'20	

STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.			Population of districts according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
						(5)	(6)
(1)	(2)			(3)	(4)	(5)	(6)
	ARAKAN DIVISION.					Male.	Female.
1	Akyab	...	...	597,242	11	29,911	26,496
2	Arakan Hill Tracts	...	...	21,418	3	1,592	871
3	Kyaukpyu	...	...	216,060	6	9,527	8,999
4	Sandoway	...	...	125,175	3	3,588	2,381
	PEGU DIVISION.						
5	Pegu	...	...	450,395	7	17,804	18,723
6	Tharrawaddy	...	...	454,471	10	18,462	18,751
7	Hanthawaddy	...	...	384,785	8	19,684	25,171
8	Insein	...	...	279,595	5	20,232	21,361
9	Prome	...	...	360,469	8	10,217	10,563
	IRRAWADDY DIVISION.						
10	Bassein	...	...	514,135	11	25,783	26,369
11	Henzada	...	...	571,395	12	21,074	23,386
12	Myaungmya	...	...	419,905	11	29,072	24,295
13	Maubin	...	...	346,353	9	15,326	17,115
14	Pyapôn	...	...	311,162	8	18,400	20,538
	TENASSERIM DIVISION.						
15	Salween	...	...	53,186	4	3,865	2,828
16	Thatôn	...	...	509,166	12	21,699	22,191
17	Amherst	...	...	444,152	8	13,612	13,525
18	Tavoy	...	...	150,946	5	6,853	6,006
19	Mergui	...	...	141,582	5	11,045	10,215
20	Toungoo	...	...	391,922	11	18,346	18,086

FOOT NOTES.—This statement does not include

• Secondary operations

Column (8) does not include work done

Vaccinations of Burma during the year 1939-40.

vaccinated.	Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.					
		Total.	Successful			Unknown.	No.
			Under one year.	One and under six years.	Total of all ages.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Total.							
56,407	5,128	22,684	4,627	13,689	21,036	1,647	1.
2,463	821	1,045	4	358	534	499	2.
18,526	3,088	10,048	2,090	4,849	9,122	528	3.
5,969	1,990	3,909	352	2,179	3,467	420	4.
36,527	5,218	18,105	7,061	8,120	17,459	646	5.
37,213	3,721	17,782	7,107	9,588	17,065	717	6.
44,855	5,607	12,140	4,030	6,468	11,465	575	7.
41,593	8,319	15,895	4,334	8,059	15,442	416	8.
20,780	2,598	16,557	8,137	7,860	16,268	191	9.
52,152	4,741	23,488	4,965	12,927	22,396	845	10.
44,460	3,705	27,476	11,850	12,791	27,100	334	11.
53,367	4,852	30,317	4,144	17,794	29,806	504	12.
32,441	3,605	15,047	4,315	8,897	14,899	148	13.
38,938	4,867	23,705	6,451	13,291	23,705	...	14.
6,693	1,673	* 3,812	141	640	2,567	1,191	15.
43,890	3,658	20,222	7,135	9,314	18,676	1,484	16.
27,137	3,392	17,188	4,049	8,448	15,865	1,206	17.
12,859	2,572	6,227	4,050	2,165	6,215	5	18.
21,260	4,252	9,585	1,286	5,464	9,578	5	19.
36,432	3,312	19,885	4,266	10,322	18,720	1,156	20.

Jail Vaccination and Steamer Vaccination..

included

by other Agencies and Dispensary Vaccination.

STATEMENT NO. I (a).—Showing particulars of Rural

No.	Divisions and Districts.	Re-vaccination.			Percentage of which the results
		Total.	Successful.	Unknown.	Primary.
(1)	(2)	(14)	(15)	(16)	(17)
	ARAKAN DIVISION.				
1	Akyab	33,723	3,496	4,367	100·00
2	Arakan Hill Tracts ...	1,418	292	603	97·80
3	Kyaukpyu	8,478	2,742	1,286	95·82
4	Sandoway	2,060	123	542	99·37
	PEGU DIVISION.				
5	Pegu	18,422	4,038	4,503	100·00
6	Tharrawaddy	19,431	5,321	3,689	100·00
7	Hanthawaddy	32,715	8,254	3,069	99·14
8	Insein	25,698	8,898	1,502	99·76
9	Prome	4,223	1,074	655	99·40
	IRRAWADDY DIVISION.				
10	Bassein	28,664	7,185	6,692	98·91
11	Henzada	16,984	3,434	2,117	99·85
12	Myaungmya	23,050	5,656	3,048	99·98
13	Maubin	17,394	2,211	1,332	100·00
14	Pyapôn	15,233	3,615	230	100·00
	TENASSERIM DIVISION.				
15	Salween	2,891	656	872	97·94
16	Thatôn	23,668	6,360	4,930	99·67
17	Amherst	9,949	1,157	1,454	99·27
18	Tavoy	6,632	4,179	644	99·89
19	Mergui	11,675	4,744	43	99·98
20	Toungoo	16,547	1,881	3,536	99·95

FOOT NOTES.—This statement does not include

Column (19) includes

* The cost in column 20 includes one-third of the pay and allowances

Vaccinations of Burma during the year 1939-40—contd.

successful cases in were known.						
Re-vaccination.	Persons success- fully vaccinated per 1,000 of population.	Total cost of Vaccina- tion Department.*	Number of all successful vaccinations and re-vaccinations performed by the Vaccination staff only.	Average cost of each successful case performed by the Vaccination staff.	No.	
(18)	(19)	(20)	(21)	(22)	1)	
		Rs. A. P.		Rs. A. P.		
11·91	41·08	13,253 7 4	24,532	0 8 8	1	
35·83	38·57	2,138 1 0	826	2 9 5	2	
38·13	54·91	5,387 13 8	11,864	0 7 3	3	
8·10	28·68	2,785 8 0	3,590	0 12 5	4	
29·01	46·69	12,482 2 0	21,497	0 9 3	5	
33·80	49·26	12,231 7 0	22,386	0 8 9	6	
27·84	51·25	13,476 9 0	19,719	0 10 11	7	
36·77	87·05	8,279 14 3	24,340	0 5 5	8	
30 10	48·11	7,458 7 0	17,342	0 6 11	9	
32·70	57·54	14,784 6 0	29,581	0 8 0	10	
23·10	53·44	13,146 1 9	30,534	0 6 11	11	
28·28	84·45	13,839 2 0	35,462	0 6 3	12	
13·77	49·40	10,643 7 6	17,110	0 9 11	13	
24·10	87·80	9,786 11 8	27,320	0 5 9	14	
32·49	60·60	3,589 9 0	3,223	1 1 10	15	
33·94	49·17	11,598 1 4	25,036	0 7 5	16	
13·62	38·32	8,322 12 9	17,022	0 7 10	17	
69·79	68·86	7,785 4 0	10,394	0 12 0	18	
40·78	101·16	5,111 9 5	14,322	0 5 9	19	
14·46	52·56	11,271 15 8	20,601	0 8 9	20	

Jail Vaccination and Steamer Vaccination.
re-vaccination of successful cases.
of Public Health Inspectors who verified vaccinations.

STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.		Population of districts according to Census of 1931.	Average number of Vaccinators employed throughout the year.	Total number of persons	
(1)	(2)		(3)	(4)	(5)	(6)
	MAGWE DIVISION.				Male.	Female.
21	Thayetmyo	...	252,387	7	8,570	8,712
22	Minbu	...	265,217	6	6,570	6,842
23	Magwe	...	459,097	7	11,997	11,844
24	Pakôkku	...	476,066	8	11,620	11,685
25	Chin Hills	...	171,237	6	8,658	7,491
	MANDALAY DIVISION.					
26	Mandalay	...	196,687	5	7,445	7,550
27	Kyaukse	...	143,967	4	4,790	4,503
28	Meiktila	...	301,169	4	10,674	10,204
29	Myingyan	...	438,982	10	13,672	17,807
30	Yamèthin	...	358,090	6	12,156	13,826
	SAGAING DIVISION.					
31	Bhamo	...	113,182	6	4,110	4,237
32	Myitkyina	...	164,196	8	6,709	6,142
33	Shwebo	...	431,765	10	13,792	16,819
34	Sagaing	...	316,766	6	11,450	12,647
35	Katha	...	254,170	6	7,405	7,605
36	Upper Chindwin	...	202,704	7	5,728	5,903
37	Lower Chindwin	...	372,634	7	15,110	16,691
	TOTAL OF DISTRICTS		11,671,830	270	476,548	488,378

FOOT-NOTES.—The statement does
 * Secondary operation
 Column (8) does not include work done by other

NATION.

Vaccination of Burma during the year 1939-40—contd.

vaccinated.	Average number of persons vaccinated by each Vaccinator.	Primary Vaccination.					
		Total.	Successful			Unknown.	No.
			Under one year.	One and under six years.	Total of all ages.		
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(1)
Total.							
17,282	2,469	* 12,862	2,653	6,262	11,204	1,346	21
13,412	2,235	* 8,223	2,911	4,832	7,888	246	22
23,841	3,406	13,625	8,586	4,921	13,507	115	23
23,305	2,913	15,042	5,574	7,733	13,944	963	24
16,149	2,692	7,117	1,627	2,810	4,915	2,130	25
14,995	2,999	6,174	2,962	1,772	5,041	1,066	26
9,293	2,323	5,035	2,529	2,366	4,911	124	27
20,878	5,220	9,063	3,681	4,111	8,174	884	28
31,479	3,148	19,448	8,901	6,831	16,829	2,398	29
25,982	4,330	16,551	4,677	7,212	14,586	1,721	30
8,347	1,391	* 6,097	415	2,284	4,856	1,142	31
12,851	1,606	10,129	335	3,593	6,952	2,043	32
30,611	3,061	15,666	3,239	8,445	12,317	3,172	33
24,097	4,016	10,224	3,535	5,152	8,984	1,219	34
15,010	2,502	11,865	2,017	7,210	10,214	1,623	35
11,631	1,662	7,374	2,793	3,334	7,216	91	36
31,801	4,543	15,495	9,002	6,206	15,410	82	37
964,926	3,574	505,107	155,831	248,297	468,333	32,882	

not include Jail Vaccination and Steamer Vaccination.
included.
Agencies and Dispensary Vaccination.

STATEMENT NO. I (a).—*Showing particulars of Rural*

No.	Divisions and Districts.	Re-vaccination.			Percentage of which the results
		Total.	Successful.	Unknown.	Primary.
(1)	(2)	(14)	(15)	(16)	(17)
MAGWE DIVISION.					
21	Thayetmyo	4,610	1,263	1,011	97·29
22	Minbu	5,207	1,420	929	98·88
23	Magwe	10,216	2,422	462	99·98
24	Pakôkku	8,263	1,892	684	99·04
25	Chin Hills	9,032	3,504	3,395	98·56
MANDALAY DIVISION.					
26	Mandalay	8,821	797	1,732	98·69
27	Kyauksè	4,258	1,214	685	100·00
28	Meiktila	11,815	1,605	4,521	99·94
29	Myingyan	12,031	2,210	3,836	98·70
30	Yamèthin	9,431	3,051	2,810	98·35
SAGAING DIVISION.					
31	Bhamo	2,256	792	439	98·00
32	Myitkyina	2,722	1,009	838	85·98
33	Shwebo	14,945	2,771	8,373	98·58
34	Sagaing	13,873	3,241	2,943	99·77
35	Katha	3,145	779	728	99·73
36	Upper Chindwin	4,257	2,928	343	99·08
37	Lower Chindwin	16,306	8,011	3,076	99·98
TOTAL OF DISTRICTS ...		460,043	114,225	81,919	99·18

FOOT-NOTE.—The statement does not include
Column (19) includes re-vaccination

* The cost in column 20 includes one-third of the pay and allowances.

NATION.

Vaccinations of Burma during the year 1939-40—concl'd.

successful cases in were known.					
Re-vaccination.	Persons success- fully vaccinated and re-vaccinated per 1,000 of population.	Total cost of Vaccina- tion Department.*	Number of all successful vaccinations, and re-vaccinations performed by the Vaccination staff only.	Average cost of each successful case performed by the Vaccination staff.	No.
(18)	(19)	(20)	(21)	(22)	(1)
		Rs. A. P.		Rs. A. P.	
35'09	49'40	5,969 11 6	12,467	0 7 8	21
33'19	35'10	4,950 13 0	9,308	0 8 6	22
24'83	34'70	7,336 1 0	15,929	0 7 4	23
24'96	33'26	9,377 6 0	15,836	0 9 6	24
62'16	49'17	7,628 12 0	8,419	0 14 6	25
11'24	29'68	6,021 14 0	5,838	1 0 6	26
33'98	42'54	5,627 8 0	6,125	0 14 8	27
22'00	32'47	4,128 5 0	9,779	0 6 9	28
26'97	43'37	11,519 0 6	19,039	0 9 8	29
46'08	49'25	6,464 13 0	17,637	0 5 10	30
43'59	49'90	3,923 14 4	5,648	0 11 1	31
53'56	48'48	5,357 12 8	7,961	0 10 9	32
42'16	34'94	9,968 8 0	15,088	0 10 7	33
29'65	38'59	5,954 15 0	12,225	0 7 10	34
32'23	43'25	10,185 3 0	10,993	0 14 1	35
74'81	50'04	9,301 5 0	10,144	0 14 8	36
60'55	62'85	6,852 6 0	23,421	0 4 8	37
30'21	49'91	307,940 10 4	582,558	0 8 5	

Jail Vaccination and Steamer Vaccination.

successful cases.

of Public Health Inspectors who verified Vaccinations.

STATEMENT NO. I (b)—Showing particulars of Urban Vaccinations

No.	Divisions and Towns.		Population of towns according to Census of 1931.	Average number of vaccinators employed throughout the year.	Total number of persons	
(1)	(2)		(3)	(4)	(5)	(6)
					Male.	Female.
ARAKAN DIVISION.						
1	Akyab	...	38,094	2	7,954	608
2	Minbya	...	2,244	1	263	164
3	Kyaukpyu	...	4,232	...	171	96
4	Sadoway	...	4,070	1	350	192
PEGU DIVISION.						
5	Rangoon	...	398,967	21	151,191	55,151
6	Pegu	...	21,626	1	6,738	5,809
7	Nyaunglebin	...	7,790	1	1,032	689
8	Tharrawaddy	...	7,131	...	721	702
9	Thônze	...	7,962	1	418	377
10	Zigôn	...	6,365	1	242	208
11	Letpadan	...	12,160	1	332	296
12	Gyobingauk	...	7,675	1	259	159
13	Minhla	...	4,413	1	253	192
14	Nattalin	...	5,633	1	176	211
15	Syriam	...	15,070	...	5,302	1,376
16	Thôngwa	...	8,976	1	1,447	1,479
17	Insein	...	20,487	1	4,371	3,596
18	Thamaing	...	5,645	} 1 {	620	639
19	Kamayut	...	7,256		1,521	1,362
20	Thingangyun	...	7,984		651	538
21	Kanbe	...	6,575	} 1 {	828	634
22	Prome	...	28,295		2	2,621
23	Shwedaung	...	8,408	...	452	300
24	Paungdè	...	13,479	1	2,776	2 500
IRRAWADDY DIVISION.						
25	Bassein	...	45,662	3	3,486	2,704
26	Ngathainggyaung	...	5,380	...	396	249
27	Kyônpyaw	...	5,866	1	183	206

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary Vaccination.				No.
		Total.	Successful.			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
Total.						
8,562	4,281	732	586	105	715	1
427	427	53	51	2	53	2
267	...	150	133	15	148	3
542	542	112	79	23	103	4
206,342	9,826	12,955	9,737	2,096	12,241	5
12,547	12,547	1,133	929	169	1,131	6
1,721	1,721	420	337	70	414	7
1,423	...	237	149	88	237	8
795	795	278	163	115	278	9
450	450	178	116	59	177	10
628	628	365	235	103	358	11
418	418	138	108	23	131	12
445	445	166	119	47	166	13
387	387	190	121	68	190	14
6,678	...	492	348	142	492	15
2,926	2,926	*499	172	211	481	16
7,967	7,967	1,015	699	297	1,010	17
1,259	4,142	181	113	64	181	18
2,883		424	263	137	424	19
1,189	2 651	352	320	32	352	20
1,462		359	343	16	359	21
4,787	2,394	1,070	930	133	1,070	22
752	...	168	159	8	167	23
5,276	5,276	1,161	404	702	1,149	24
6,190	2,063	1,289	1,134	87	1,241	25
645	...	256	104	84	247	26
389	389	261	138	123	261	27

operations included.

STATEMENT NO. I (b)—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.	Primary Vaccination.	Re-vaccination.		
		Unknown.	Total.	Successful.	Unknown.
(1)	(2)	(13)	(14)	(15)	(16)
ARAKAN DIVISION.					
1	Akyab	13	7,830	1,718	3,912
2	Minbya : ... ..	...	374	74	...
3	Kyaukpyu	2	117	46	41
4	Sandoway	9	430	52	85
PEGU DIVISION.					
5	Rangoon	565	193,387	27,428	59,084
6	Pegu ... ..	...	11,414	5,640	1,374
7	Nyaunglebin	6	1,301	481	41
8	Tharrawaddy ... ..	...	1,186	385	12
9	Thônze ... ..	...	517	45	...
10	Zigôn	1	272	131	30
11	Letpadan	6	263	89	12
12	Gyöbingauk	7	280	59	40
13	Minhla ... ..	...	279	171	...
14	Nattalin ... ..	...	197	37	16
15	Syriam ... ..	...	6,186	523	...
16	Thôngwa	18	2,430	772	217
17	Insein	5	6,952	2,157	442
18	Thamaing ... ..	...	1,078	395	57
19	Kamayut ... ..	...	2,459	920	296
20	Thingangyun ... ..	...	837	251	56
21	Kanbe ... ..	...	1,103	416	59
22	Prome ... ..	...	3,717	1,890	216
23	Shwedaung ... ..	...	584	229	22
24	Paungdè	12	4,115	775	1,194
IRRAWADDY DIVISION.					
25	Bassein	48	4,901	1,167	772
26	Ngathainggyaung	5	389	132	50
27	Kyônpyaw ... ..	...	128	72	23

* The cost in column 20 includes one-third of the pay and

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department. †	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	Average cost of each successful case performed by the vaccination staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
99·44	43·85	63·87	2,583 5 0	2,433	1 1 0	1
100·00	19·79	56·60	398 6 0	127	3 2 2	2
100·00	60·53	45·84	680 3 4	194	3 8 1	3
100·00	15·07	38·08	377 4 0	155	2 6 11	4
98·80	20·42	99·43	44,756 12 2	39,669	1 2 1	5
99·82	56·18	313·10	2,060 12 2	6,771	0 4 10	6
100·00	38·17	114·89	844 12 0	895	0 15 1	7
100·00	32·79	87·22	359 10 0	622	0 9 3	8
100·00	8·70	40·57	547 7 0	323	1 11 1	9
100·00	54·13	48·39	563 11 0	308	1 13 3	10
99·72	35·46	36·76	1,112 15 0	447	2 7 10	11
100·00	24·58	24·76	422 10 0	190	2 3 7	12
100·00	61·29	76·37	405 15 0	337	1 3 3	13
100·00	20·44	40·30	1,197 8 0	227	5 4 5	14
100·00	8·45	67·35	1,784 3 0	1,015	1 12 2	15
100·00	34·88	139·59	801 5 0	1,253	0 10 3	16
100·00	33·13	154·59	1,927 13 0	3,167	0 9 9	17
100·00	38·69	102·04	548 3 0	576	0 15 3	18
100·00	42·53	185·23	575 0 0	1,344	0 6 10	19
100·00	32·14	75·53	509 9 0	603	0 13 6	20
100·00	39·85	117·87	497 4 0	775	0 10 3	21
100·00	53·98	104·61	1,844 8 4	2,960	0 10 0	22
99·40	40·75	47·10	390 14 0	396	0 15 10	23
100·00	26·53	142·74	1,071 6 0	1,924	0 8 11	24
100·00	28·26	52·74	1,698 4 0	2,408	0 11 3	25
98·41	38·94	70·45	259 11 0	379	0 11 0	26
100·00	68·57	56·77	838 8 0	333	2 8 3	27

allowances of Public Health Inspectors who verified vaccinations.

STATEMENT NO. I (b)—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.			Population of towns according to Census of 1931.	Average number of vaccinators employed throughout the year.	Total number of persons	
						(5)	(6)
(1)	(2)			(3)	(4)	Male.	Female.
	IRRAWADDY DIVISION— <i>concl'd.</i>						
28	Henzada	...	...	28,542	1	1,955	1,294
29	Myanaung	...	...	9,072	1	841	839
30	Kyangin	...	...	6,780	1	450	486
31	Myaungmya	...	...	7,773	1	534	527
32	Wakèma	...	...	9,359	1	827	851
33	Moulmeingyun	...	...	7,747	1	634	513
34	Maubin	...	...	8,897	1	1,450	1,109
35	Yandoon	...	...	9,925	1	1,103	589
36	Danubyu	...	...	6,334	1	793	711
37	Pyapôn	...	...	12,338	1	277	261
38	Kyaiklat	...	...	10,658	1	1,088	1,039
	TENASSERIM DIVISION.						
39	Thatôn	...	...	16,851	1	1,857	1,142
40	Kyaikto	...	...	6,611	1	390	182
41	Moulmein	...	...	65,506	3	7,198	6,171
42	Kawkareik	...	...	6,575	...	162	104
43	Tavôy	...	...	29,018	2	2,151	2,455
44	Mergui	...	...	20,405	1	2,051	1,575
45	Toungoo	...	...	23,223	1	3,102	1,918
46	Shwegyin	...	...	5,876	...	399	294
47	Pyu	...	...	7,807	1	410	428
	MAGWE DIVISION.						
48	Thayetmyo	...	...	9,279	1	426	425
49	Allanmyo	...	...	12,511	1	529	423
50	Minbu	...	...	6,005	1	388	233
51	Salin	...	...	6,654	...	234	189
52	Magwe	...	...	8,209	1	785	262

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

vaccinated. (7)	Average number of persons vaccinated by each vaccina- tor. (8)	Primary Vaccination.				No. (1)
		Total. (9)	Successful.			
			Under one year. (10)	One and under six years. (11)	Total of all ages. (12)	
Total.						
3,249	3,249	638	616	22	638	28
1,680	1,680	234	228	6	234	29
936	936	193	158	35	193	30
1,061	1,061	587	173	304	558	31
1,678	1,678	635	160	397	635	32
1,147	1,147	346	170	129	336	33
2,559	2,559	743	665	78	743	34
1,692	1,692	338	229	73	336	35
1,504	1,504	238	221	2	223	36
538	538	365	270	79	365	37
2,127	2,127	623	291	258	615	38
2,999	2,999	688	496	93	627	39
572	572	215	142	63	214	40
13,369	4,456	1,494	1,432	61	1,493	41
266	...	173	165	7	172	42
4,606	2,303	1,085	1,009	76	1,085	43
3,626	3,626	888	563	152	856	44
5,020	5,020	1,032	660	288	1,022	45
693	...	155	138	8	155	46
838	838	438	296	118	426	47
851	851	464	363	64	453	48
952	952	608	273	319	592	49
621	621	323	196	106	302	50
423	...	243	158	84	242	51
1,047	1,047	243	194	49	243	52

STATEMENT NO. I (b)—*Showing particulars of Urban Vaccinations*

No.	Divisions and Towns.		Primary Vaccination.	Re-vaccination.		
			Unknown.	Total.	Successful.	Unknown.
(1)	(2)		(13)	(14)	(15)	(16)
IRRAWADDY DIVISION— <i>concl'd.</i>						
28	Henzada	...	...	2,611	256	161
29	Myanaung	...	...	1,446	136	...
30	Kyangin	...	...	743	236	...
31	Myaungmya	...	29	474	216	102
32	Wakèma	...	...	1,043	102	...
33	Moulmeingyun	...	10	801	175	98
34	Maubin	...	...	1,816	113	139
35	Yandoon	...	2	1,354	24	16
36	Danubyu	...	15	1,266	170	74
37	Pyapôn	...	...	173	52	12
38	Kyaiklat	...	8	1,504	222	93
TENASSERIM DIVISION.						
39	Thatôn	...	61	2,311	513	991
40	Kyaikto	...	1	357	146	14
41	Moulmein	...	...	11,875	5,107	2,119
42	Kawkareik	...	1	93	5	6
43	Tavoy	...	...	3,521	1,552	322
44	Mergui	...	12	2,738	1,131	43
45	Toungoo	...	9	3,988	1,084	91
46	Shwegyin	...	...	53	26	38
47	Pyu	...	12	400	103	297
MAGWE DIVISION.						
48	Thayetmyo	...	8	387	68	13
49	Allanmyo	...	9	344	32	7
50	Minbu	...	2	298	159	11
51	Salin	...	1	180	46	7
52	Magwe	...	...	804	60	97

* The cost in column 20 includes one-third of pay and

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population,	Total cost of Vaccination Department.*	Number of all successful vaccinations and re-vaccinations performed by the vaccination staff only.	Average cost of each successful case performed by the vaccination staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
100·00	10·45	31·32	1,634 13 8	894	1 13 3	28
100·00	9·41	40·78	1,012 12 8	370	2 11 10	29
100·00	31·76	63·27	776 15 4	429	1 13 0	30
100·00	58·06	99·58	1,204 10 0	774	1 8 11	31
100·00	9·78	78·75	860 7 0	737	1 2 8	32
100·00	24·89	65·96	1,159 0 0	511	2 4 3	33
100·00	6·74	96·21	682 4 0	856	0 12 9	34
100·00	1·79	36·27	707 6 0	360	1 15 5	35
100·00	14·26	62·05	1,175 9 0	393	2 15 10	36
100·00	32·30	33·80	937 4 6	417	2 4 0	37
100·00	15·73	78·53	1,250 11 0	837	1 7 11	38
100·00	38·86	67·65	1,261 15 0	1,140	1 1 9	39
100·00	42·57	54·45	785 4 0	360	2 2 11	40
99·93	52·35	100·75	2,932 12 0	6,600	0 7 1	41
100·00	5·75	26·92	562 2 0	177	3 2 10	42
100·00	48·52	90·87	2,533 14 0	2,637	0 15 4	43
97·72	41·97	97·38	1,545 15 8	1,987	0 12 5	44
99·90	27·82	90·69	581 3 0	2,106	0 4 5	45
100·00	5·20	30·80	172 4 0	181	0 15 3	46
100·00	100·00	67·76	727 13 0	529	1 6 0	47
99·34	18·18	56·15	503 1 0	521	0 15 5	48
98·83	9·50	49·88	673 14 0	624	1 1 3	49
94·08	55·40	76·77	1,094 9 0	461	2 6 0	50
100·00	26·59	43·28	621 4 0	288	2 2 6	51
100·00	8·49	36·91	958 0 0	303	3 2 7	52

allowances of Public Health Inspectors who verified vaccinations.

STATEMENT NO. I (b)—Showing particulars of Urban Vaccinations

No.	Divisions and Towns.	Population of towns according to Census of 1931.	Average number of vaccina- tors employed throughout the year.	Total number of persons	
				(5)	(6)
(1)	(2)	(3)	(4)	Male.	Female.
MAGWE DIVISION—concl'd.					
53	Taungdwingyi	8,339	1	1,686	768
54	Yenangyaung	11,098	1	359	353
55	Chauk	12,830	1	676	498
56	Pakôkku	23,115	1	348	253
MANDALAY DIVISION.					
57	Mandalay	134,950	4	27,565	27,242
58	Maymyo	16,586	1	1,552	1,256
59	Myitngè	5,682	...	2,176	1,137
60	Kyauksè	7,353	1	584	517
61	Meiktila	8,830	1	653	453
62	Myingyan	25,457	1	1,585	966
63	Nyaung U	8,118	1	176	157
64	Yamèthin	9,291	1	559	435
65	Pyinmana	17,656	1	1,263	1,000
66	Pyawbwè	5,783	...	218	141
SAGAING DIVISION.					
67	Bhamo	8,011	1	760	390
68	Myitkyina	7,328	1	482	323
69	Shwebo	11,286	1	994	1,125
70	Ye-U	3,739	...	124	71
71	Sagaing	14,127	1	818	605
72	Myinmu	5,072	1	453	407
73	Mawlaik	2,278	...	243	123
74	Mônnya	10,800	1	826	403
Total of Towns ...		1,407,129	90	268,888	145,246

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary Vaccination.				No.
		Total.	Successful .			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
Total						
2,454	2,454	298	257	19	295	53
712	712	563	385	178	563	54
1,174	1,174	405	262	104	404	55
601	601	429	384	28	425	56
54,807	13,702	* 8,056	7,133	863	8,039	57
2,808	2,808	608	539	51	594	58
3,313	...	315	239	76	315	59
1,101	1,101	282	196	58	265	60
1,106	1,106	372	229	143	372	61
2,551	2,551	877	658	93	778	62
333	333	239	174	36	236	63
994	994	407	298	61	384	64
2,263	2,263	550	415	86	501	65
359	...	212	126	68	206	66
1,150	1,150	410	191	212	403	67
805	805	448	194	179	421	68
2,119	2,119	426	388	33	421	69
195	...	117	112	5	117	70
1,423	1,423	293	226	39	287	71
860	860	258	225	33	258	72
366	...	134	70	35	115	73
1,229	1,229	488	364	82	451	74
414,134	4,601	53,810	40,321	10,372	52,384	

operations included.

STATEMENT NO. I (b)—*Showing particulars of Urban Vaccinations*

No	Divisions and Towns.	Primary Vaccination.	Re-vaccination.		
		Unknown.	Total.	Successful.	Unknown.
(1)	(2)	(13)	(14)	(15)	(16)
MAGWE DIVISION— <i>concl.</i>					
53	Taungdwingyi	3	2,156	527	189
54	Yenangyaung ... ..	...	149	42	5
55	Chauk ... ..	..	769	155	151
56	Pakôkku	3	172	8	18
MANDALAY DIVISION.					
57	Mandalay ... ..	...	46,768	7,855	5,001
58	Maymyo	14	2,200	313	1,339
59	Myitngè ... ..	...	2,998	24	...
60	Kyauksè	4	819	109	86
61	Meiktila ... ..	...	734	126	157
62	Myingyan	89	1,674	80	773
63	Nyaung-U	3	94	23	7
64	Yamèthin	22	587	91	130
65	Pyinmana	49	1,713	428	492
66	Pyawbwe	6	147	19	30
SAGAING DIVISION.					
67	Bhamo	7	740	132	608
68	Myitkyina	27	357	84	44
69	Shwebo	4	1,693	547	628
70	Ye-U ... ..	...	78	15	...
71	Sagaing	6	1,130	272	300
72	Myinmu ... ..	...	602	163	127
73	Mawlaik	14	232	52	30
74	Mônýwa	37	741	294	168
Total of Towns ...		1,165	360,344	69,148	83,085

* The cost in column 20 includes one-third of the pay

NATION.

(excluding jails and ports) of Burma during the year 1939-40.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and re-vaccinations performed by the Vaccination staff only.	Average cost of each successful case performed by the Vaccination staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
100'00	26'79	98'57	493 1 0	822	0 9 7	53
100'00	29'17	54'51	1,003 13 0	605	1 10 7	54
99'75	25'08	43'57	561 13 0	559	1 0 1	55
99'77	5'19	18'73	1,142 3 8	433	2 1 2	56
99'79	18'81	117'78	4,670 3 0	15,894	0 4 8	57
100'00	36'35	54'68	3,186 9 0	907	3 8 3	58
100'00	0'80	59'66	338 10 0	339	1 0 0	59
95'32	14'87	50'86	866 0 0	374	2 5 1	60
100'00	21'84	56'40	894 0 3	498	1 12 9	61
98'73	8'88	33'70	1,149 15 8	858	1 5 5	62
100'00	26'44	31'90	795 0 0	259	3 1 1	63
99'74	19'91	51'12	609 15 0	475	1 4 7	64
100'00	35'05	52'62	467 13 0	929	0 8 1	65
100'00	16'24	38'91	468 0 0	225	2 1 3	66
100'00	100'00	66'78	626 5 0	535	1 2 9	67
100'00	26'84	55'27	894 14 0	505	1 12 4	68
99'76	51'36	85'77	1,190 0 0	968	1 3 8	69
100'00	19'23	35'30	330 13 0	132	2 8 1	70
100'00	32'77	39'57	950 5 0	559	1 11 2	71
100'00	34'32	83'00	477 10 0	421	1 2 2	72
95'83	25'74	73'31	367 6 0	167	2 3 2	73
100'00	51'31	68'98	1,034 14 0	745	1 6 3	74
99'50	24'94	86'37	1,17,932 10 5	121,532	0 15 6	

and allownces of Public Health Inspectors who verified vaccinations.

STATEMENT NO. I (c)—*Showing particulars of Vaccinations in different*

No.	Areas.	Population according to Census of 1931.	Average number of vaccinators employed throughout the year.	Total number of persons	
(1)	(2)	(3)	(4)	(5)	(6)
	MILITARY CANTONMENTS.			Male.	Female.
1	Rangoon	1,448	...	520	163
2	Mingaladon	3,910	...	1,665	210
3	Mandalay	12,982	1	521	433
4	Maymyo	4,749	...	196	242
	Total of Cantonments ...	23,089	1	2,902	1,048
	Total of cases vaccinated by Railway Dispensary Staff.	...	...	4,202	1,783
	Total of cases vaccinated by other Dispensary Staff.	...	...	998	227
	Total of cases vaccinated by Private Medical Practitioners, Licensed Vaccinators, etc.	...	...	7,647	2,604
	Cost of Vaccine Depôt, Meiktila	...	...	...	...
	Cost incurred in the Office of the D.P.H., Burma.	...	...	...	...
	Total of Districts ...	11,671,830	270	476,548	488,378
	Total of Towns ...	1,407,129	90	268,888	145,246
	GRAND TOTAL, BURMA ...	13,102,048	361	761,185	639,286
	FEDERATED SHAN STATES.				
	(a) <i>Districts excluding Towns.</i>				
1	Northern Shan States ...	631,469	23	27,103	23,205
2	Southern Shan States ...	916,718	24	33,243	30,354
	Total of Districts ...	1,548,187	47	60,346	53,559
	(b) <i>Towns.</i>				
1	Lashio	4,638	1	2,565	2,013
2	Taunggyi	8,652	1	507	252
3	Kalaw	3,621	1	241	231
	Total of Towns ...	16,911	3	3,313	2,496
	Vaccination by Railway Dispensary Staff.	...	...	...	...
	Vaccination by other Dispensary Staff.	...	..	507	373
	Vaccination by Private Medical Practitioners, Licensed Vaccinators, etc.	...	...	3,104	1,068
	GRAND TOTAL, SHAN STATES	1,565,098	50	67,270	57,496

* Secondary

NATION.

areas of Burma and States during the year 1939-40.

vaccinated.	Average number of persons vaccinated by each vaccina- tor.	Primary Vaccination.				No.
		Total.	Successful.			
			Under one year.	One and under six years.	Total of all ages.	
(7)	(8)	(9)	(10)	(11)	(12)	(1)
Total.						
683	...	36	6	23	29	1
1,875	...	155	75	12	115	2
954	954	407	261	143	407	3
438	...	125	77	22	100	4
3,950	3,950	723	419	200	651	
5,985	...	1,191	582	346	1,154	
1,225	...	248	25	39	64	
10,251	...	260	184	39	226	
...	
...	
964,926	3,574	* 505,107	155,831	248,297	468,333	
414,134	4,601	* 53,810	40,321	10,372	52,384	
1,400,471	3,831	* 561,339	197,362	259,293	522,812	
50,308	2,187	29,897	2,907	15,831	28,194	1
63,597	2,650	42,918	2,284	18,297	38,533	2
113,905	2,424	72,815	5,191	34,128	66,727	
4,578	4,578	413	329	60	413	1
759	759	368	311	52	367	2
472	472	150	104	46	150	3
5,809	1,936	931	744	158	930	
...	
880	...	740	83	532	635	
4,172	...	608	221	321	592	
124,766	2,394	75,094	6,239	35,139	68,884	

operations included.

STATEMENT NO. I (c)—*Showing particulars of Vaccinations in*

No.	Areas.	Primary Vaccination.	Re-vaccination.		
		Unknown.	Total.	Successful.	Unknown.
(1)	(2)	(13)	(14)	(15)	(16)
	MILITARY CANTONMENTS.				
1	Rangoon ...	7	647	165	482
2	Mingaladon ...	40	1,720	1,232	488
3	Mandalay ...	...	547	91	19
4	Maymyo ...	5	313	96	37
	Total of Cantonments ...	52	3,227	1,584	1,026
	Total of cases vaccinated by Railway Dispensary Staff.	33	4,794	939	676
	Total of cases vaccinated by other Dispensary Staff.	184	977	25	799
	Total of cases vaccinated by Private Medical Practitioners, Licensed Vaccinators, etc.	33	9,991	1,018	7,145
	Cost of Vaccine Depôt, Meiktila	...	...	...	...
	Cost incurred in the Office of the D.P.H., Burma.	...	...	...	...
	Total of Districts ...	32,882	460,043	114,225	81,919
	Total of Towns ...	1,165	360,344	69,148	83,085
	GRAND TOTAL, BURMA ...	34,349	839,376	186,939	174,650
	FEDERATED SHAN STATES.				
	(a) <i>Districts excluding Towns.</i>				
1	Northern Shan States ...	958	20,411	12,917	1,018
2	Southern Shan States ...	4,244	20,679	8,257	1,271
	Total of Districts ...	5,202	41,090	21,174	2,289
	(b) <i>Towns.</i>				
1	Lashio ...	...	4,165	2,132	109
2	Taunggyi ...	...	391	17	252
3	Kalaw ...	...	322	83	84
	Total of Towns ...	...	4,878	2,232	445
	Vaccination by Railway Dis- pensary Staff.	...	...	...	...
	Vaccination by other Dispen- sary Staff.	60	140	111	17
	Vaccination by Private Medical Practitioners, Licensed Vac- cinators, etc.	16	3,564	2,850	182
	GRAND TOTAL, SHAN STATES	5,278	49,672	26,367	2,933

* The cost in column 20 includes one-third of the pay and

NATION.

different areas of Burma and States during the year 1939-40.

Percentage of successful cases in which the results were known.		Persons successfully vaccinated and re-vaccinated per 1,000 of population.	Total cost of Vaccination Department.	Number of all successful vaccinations and revaccinations performed by the Vaccination staff only.	Average cost of each successful case performed by the Vaccination staff.	No.
Primary.	Re-vaccination.					
(17)	(18)	(19)	(20)	(21)	(22)	(1)
			Rs. A. P.		Rs. A. P.	
100·00	100·00	133·98	120 0 0	194	0 9 11	1
100·00	10·00	344·50	...	1,347	...	2
100·00	17·23	38·36	552 3 0	498	1 1 7	3
83·33	34·78	41·27	...	196	...	4
97·02	71·97	96·80	672 3 0	2,235	0 4 10	
99·65	22·80	...	...	...	...
100·00	14·04	...	...	...	...
99·56	35·77	...	...	...	...
...	...	...	29,289 3 3	...	...
...	...	...	25 13 0	...	...
99·18	30·21	49·91	3,07,940 10 4	582,558	0 8 5	
99·50	24·94	86·37	1,17,932 10 5	121,532	0 15 6	
99·21	28·12	54·17	4,55,860 8 0	706,325	0 10 4	
97·43	66·61	65·10	14,817 2 0	41,111	0 5 9	1
99·64	42·54	51·04	19,245 8 3	46,790	0 6 7	2
98·69	54·57	56·78	34,062 10 3	87,901	0 6 2	
100·00	52·56	548·73	963 10 0	2,545	0 6 1	1
99·73	12·23	44·38	392 12 0	384	1 0 4	2
100·00	34·87	64·35	315 8 0	233	1 5 8	3
99·89	50·35	186·98	1,671 14 0	3,162	0 8 6	
...	
93·38	90·24	...	...	...	...
100·00	84·27	...	...	...	...
98·67	56·41	60·86	35,734 8 3	91,063	0 6 3	

allowances of Public Health Inspectors who verified vaccinations.

VACCI SUM

(1)	Total number of persons vaccinated.		Total number of operations performed		Percentage of successful cases in which results were known.	
	Primary. (2)	Re-vacci- nation. (3)	Primary. (4)	Re-vacci- nation. (5)	Primary. (6)	Re-vacci- nation. (7)
<i>Vaccination.</i>						
1. By Special Staff—						
(a) Districts (excluding towns)	504,883	460,043	505,107	460,043	99·18	30·21
(b) Towns ...	53,790	360,344	53,810	360,344	99·50	24·94
Total ...	558,673	820,387	558,917	820,387	99·21	27·98
2. By Railway Dispensary Staff	1,191	4,794	1,191	4,794	99·65	22·80
3. By other Dispensary Staff ...	248	977	248	977	100·00	14·04
4. By Private Medical Practitioners, Licensed Vaccinators, etc.	260	9,991	260	9,991	99·56	35·77
5. By Cantonment Staff ...	723	3,227	723	3,227	97·02	71·97
6. Cost of Vaccine Dépôt, Meiktila	...	...	...	...	...	...
7. Cost incurred in the office of Director of Public Health, Burma.	...	...	...	...	...	...
GRAND TOTAL, BURMA ...	561,095	839,376	561,339	839,376	99·21	28·12
Shan States ...	73,746	45,968	73,746	45,968	98·71	54·14
By Railway Dispensary Staff ...	...	...	...	...	...	...
By other Dispensary Staff ...	740	140	740	140	93·38	90·24
By Private Medical Practitioners, Licensed Vaccinators, etc.	608	3,564	608	3,564	100·00	84·27
Shan States, Total ...	75,094	49,672	75,094	49,672	98·67	56·41

NATION.
MARY

Average number of persons vaccinated by each vaccinator.		Number of children successfully vaccinated.		Ratio of successful vaccination per 1,000 population.	Total cost of Department.	Number of all successful vaccinations performed.	Average cost of each successful case.
Vaccinators employed. (8)	Persons vaccinated by each vaccinator. (9)	Under one year. (10)	One year and under six years. (11)				
				(12)	(13)	(14)	(15)
					Rs. A. P.		Rs. A. P.
270	3,574	155,831	248,297	49·91	3,07,940 10 4	532,558	0 8 5
90	4,601	40,321	10,372	86·37	1,17,932 10 5	121,532	0 15 6
360	3,831	196,152	258,669	53·83	4,25,873 4 9	704,090	0 9 8
...	...	582	346	...	...	...	...
...	...	25	39	...	...	...	...
...	...	184	39	...	...	...	...
1	3,950	419	200	96·80	672 3 0	2,235	0 4 10
...	...	...	...	...	29,289 3 3	...	...
...	...	...	...	...	25 13 0	...	...
361	3,831	197,362	259,293	54·17	4,55,860 8 0	706,325	0 10 4
50	2,394	5,935	34,286	58·18	35,734 8 3	91,063	0 6 3
...
...	...	83	532	...	...	...	...
...	...	221	321	...	...	...	...
50	2,394	6,239	35,139	60·86	35,734 8 3	91,063	0 6 3

COMPARATIVE STATEMENT NO. II.—*Showing the number of persons vaccinated in the Province of Burma in*

Establishments.	Persons prima									
	Total number.	Number success-fully vacci-nated.	Total number.	Number success-fully vacci-nated.	Total number.	Number success-fully vacci-nated.	Total number.	Number success-fully vacci-nated.	Total number.	Number success-fully vacci-nated.
	1930-31.		1931-32.		1932-33.		1933-34.		1934-35.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Government.	9,581	7,766	9,335	7,566	12,707	8,769	12,912	9,950	37,308	26,523
Municipal	48,013	44,130	57,174	52,211	59,848	54,675	60,027	56,010	55,986	52,335
Local Funds.	492,893	458,389	469,598	436,335	557,582	507,654	556,858	499,306	523,635	474,423
Dispensary	3,810	546	2,660	1,200	2,020	420	2,838	906	1,477	557
Other Agencies.	220	200	736	711	3,535	1,150	217	181	1,369	1,107
Total ...	554,517	511,031	539,503	498,023	635,692	572,668	632,852	566,353	619,775	554,945
Federated Shan States.	59,680	53,997	65,080	58,775	87,668	70,225	70,834	60,740	58,025	48,504

NATION.

primarily vaccinated and the number of those persons who were successfully each of the undermentioned official years.

rily vaccinated.										Establish- ments. (12)
Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	Total number.	Number success- fully vacci- nated.	
1935-36. (7)		1936-37. (8)		1937-38. (9)		1938-39. (10)		1939-40. (11)		
22,799	18,439	12,612	10,311	13,739	11,799	12,770	11,720	16,672	13,230	Govern- ment.
53,398	48,657	54,630	52,281	52,786	50,644	46,808	45,395	53,790	52,384	Municipal
520,013	481,150	572,489	528,693	535,585	487,813	493,108	464,144	488,934	455,754	Local Funds.
2,064	1,110	2,501	650	2,243	914	2,203	692	1,439	1,218	Dispen- sary.
198	184	180	170	250	158	160	143	260	226	Other Agen- cies.
598,472	549,540	642,412	592,105	604,603	551,328	555,049	522,094	561,095	522,812	Total.
56,076	51,848	60,709	51,813	71,971	54,834	68,984	56,974	75,094	68,884	Federated Shan States.

STATEMENT NO. III.—*Showing receipts of the Vaccine*

Item No.	Particulars.	April.	May.	June.	July.	August.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1	<i>Sale Proceeds of Vaccine Lymph—</i>					
	(a) Received at other Treasuries	1,919 1 0	351 8 0	5,147 3 0	4,170 11 0	4,659 1 0
	(b) Credited in cash at Meiktila Treasury by the Vaccine Depôt.	14 4 0	14 1 0	...	...	...
2	<i>Miscellaneous—</i>					
	(a) Sale of Vaccinated Calves	...	...	...	...	...
	(b) Sale of Rabbits	...	...	...	...	...
	(c) Sale of Miscellaneous	0 8 0	7 0 0	...	...	10 0 0
	(d) Water charges	...	...	...	38 14 0	9 3 0
3	Value of Vaccine lymph supplied free to Government Institutions.	163 10 0	173 6 0	173 11 0	188 3 0	177 14 0
	Total	2,097 7 0	545 15 0	5,320 14 0	4,397 12 0	4,856 2 0

NATION.

Depôt, Meiktila, during the year 1939-40.

September.	October.	November.	December.	January.	February.	March.	Total.	Item No.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(1)
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	1
5,791 3 0	1,907 0 0	2,325 14 0	5,384 9 0	3,461 12 0	4,275 13 0	6,449 1 0	45,842 12 0	
20 8 0	...	31 9 0	88 11 0	65 15 0	28 11 0	44 8 0	308 3 0	
...	...	...	...	...	...	...	...	2
...	
5 0 0	...	...	4 5 0	...	...	...	26 13 0	
9 12 0	9 12 0	9 12 0	9 12 0	7 6 0	9 12 0	9 12 0	113 15 0	
167 10 0	197 3 0	208 1 0	169 12 0	334 8 0	251 13 0	289 10 0	2,495 5 0	3
5,994 1 0	2,113 15 0	2,575 4 0	5,657 1 0	3,869 9 0	4,566 1 0	6,792 15 0	48,787 0 0	

STATEMENT NO. IV.—Showing expenditure of the Vaccine

Item No.	Particulars.	April.	May.	June.	July.	August.
(1)	(2)	(3)	(4)	(5)	(6)	(7)
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1	Pay of Officer—Director ...	1,120 0 0	1,120 0 0	1,120 0 0	1,120 0 0	1,120 0 0
2	Pay of Establishment—Permanent—					
	(a) Assistant Director ...	104 0 0	104 0 0	104 0 0	104 0 0	104 0 0
	(b) Clerks ...	158 0 0	158 0 0	158 0 0	158 0 0	158 0 0
	(c) Head Loader ...	32 0 0	32 0 0	32 0 0	32 0 0	31 12 0
	(d) Laboratory attendant and media maker.	60 5 0	60 5 0	60 5 0	36 0 0	36 0 0
3	Allowances, Honoraria, etc.—Fixed—					
	(a) Compensatory allowance of Director.	90 0 0	90 0 0	90 0 0	90 0 0	90 0 0
	(b) Compensatory allowance of Assistant Director.	16 0 0	16 0 0	16 0 0	16 0 0	9 13 0
	(c) Travelling allowance ...	...	...	...	13 9 0	...
4	Contingencies—					
	(a) Hire of calves for lymph ...	...	...	96 0 0	48 0 0	78 0 0
	(b) Medicines and instruments ...	0 5 0	...	853 1 5	1 2 0	...
	(c) Feeding charges ...	3 9 0	33 3 0	45 12 0	45 10 0	49 6 0
	(d) Pay of inferior servants ...	216 0 0	239 10 0	231 1 0	195 3 0	204 0 0
	(e) Books, maps and publications	...	...	...	...	...
	(f) Postage and telegrams ...	95 2 0	95 4 0	95 0 6	95 6 9	95 1 6
	(g) Rents, rates and taxes ...	...	...	...	226 10 0	...
	(h) Furniture, apparatus and office requisites.	...	...	53 6 0	21 0 0	...
	(i) Transport ...	0 11 0	8 11 0	24 4 0	25 0 0	15 3 0
	(j) Unclassified :—					
	(1) Purchase and repair of tools and plant.	4 2 0	...	8 4 0	17 13 0	23 4 0
	(2) Other office expenses and miscellaneous.	353 4 0	299 2 0	205 14 0	198 5 0	283 10 0
	(k) Petty construction and repairs	7 13 0	10 13 0	395 0 0	20 15 0	16 0 0
	(l) Newspapers and periodicals	...	13 0 0	...	...	...
	Total ...	2,261 3 0	2,280 0 0	3,587 15 11	2,464 9 9	2,314 1 6

NATION.

Depôt, Meiktila, during the year 1939-40.

September.	October.	November.	December.	January.	February.	March.	Total.	Item No.
(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(1)
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
1,120 0 0	1,120 0 0	1,120 0 0	1,120 0 0	1,120 0 0	913 9 0	480 0 0	12,593 9 0	1
104 0 0	104 0 0	104 0 0	104 0 0	104 0 0	104 0 0	104 0 0	1,248 0 0	2
198 0 0	198 0 0	160 0 0	160 0 0	160 0 0	160 0 0	160 0 0	1,986 0 0	
32 0 0	32 0 0	32 0 0	32 0 0	32 0 0	32 0 0	32 0 0	383 12 0	
36 0 0	36 0 0	36 0 0	36 0 0	36 0 0	36 0 0	36 0 0	504 15 0	
90 0 0	90 0 0	90 0 0	90 0 0	90 0 0	60 15 0	...	960 15 0	3
16 0 0	16 0 0	16 0 0	16 0 0	16 0 0	16 0 0	16 0 0	185 13 0	
...	...	...	...	...	...	...	13 9 0
96 0 0	72 0 0	48 0 0	78 0 0	78 0 0	288 0 0	468 0 0	1,350 0 0	4
0 4 0	12 15 0	0 2 0	86 15 0	0 2 0	10 14 0	409 10 7	1,375 7 0	
56 9 0	48 1 0	57 4 0	45 2 0	56 1 0	73 14 0	136 13 0	651 4 0	
204 13 0	205 0 0	205 0 0	205 0 0	205 0 0	205 0 0	206 13 0	2,522 8 0	
...	...	...	...	...	...	9 15 0	9 15 0
95 0 0	95 2 3	95 0 0	95 0 0	95 0 9	135 2 0	138 0 0	1,224 3 9	
...	...	...	...	...	...	...	226 10 0
...	...	...	...	...	...	5 8 0	79 14 0
23 13 0	31 2 0	16 6 0	12 5 0	25 9 0	1 15 0	14 4 0	199 3 0	
...	19 4 0	13 13 0	...	18 6 0	6 2 0	16 12 0	127 12 0	
311 8 0	72 4 0	135 0 0	78 5 0	239 11 0	236 12 0	585 10 6	2,999 5 6	
...	25 0 0	55 0 0	5 0 0	...	...	96 0 0	631 9 0
...	...	...	...	1 15 0	...	...	14 15 0
2,383 15 0	2,176 12 3	2,183 9 0	2,163 11 0	2,277 12 9	2,280 3 0	2,915 6 1	29,289 3 3	

VACCINATION.

APPENDIX A.—Statement showing the ratio per 10,000 successfully vaccinated and the mortality from Small-pox by Quinquennial periods.

Official Year.		Ratio per 10,000 successfully vaccinated.	Quinquennial mean.	Calendar Year.		Ratio per 10,000 of mortality from small-pox.	Quinquennial mean.
(1)		(2)	(3)	(4)		(5)	(6)
BURMA.							
1924-25	...	485·25		1924	...	2·31	
1925-26	...	479·86		1925	...	3·56	
1926-27	...	420·72	469·07	1926	...	2·16	2·44
1927-28	...	454·15		1927	...	1·57	
1928-29	...	505·39		1928	...	2·61	
1929-30	...	520·93		1929	...	1·70	
1930-31	...	495·10	507·93	1930	...	0·85	1·25
1931-32	...	441·96		1931	...	0·40	
1932-33	...	539·16		1932	...	2·05	
1933-34	...	542·19		1933	...	1·24	
1934-35	...	556·26		1934	...	1·32	
1935-36	...	583·18		1935	...	1·04	
1936-37	...	651·89	582·89	1936	...	1·12	0·97
1937-38	...	605·94		1937	...	1·13	
1938-39	...	517·20	...	1938	...	0·21	
1939-40	...	541·71		1939	...	0·10	
FEDERATED SHAN STATES.							
1924-25	...	314·93					
1925-26	...	457·27					
1926-27	...	298·85	379·89				
1927-28	...	387·93					
1928-29	...	440·45					
1929-30	...	468·45					
1930-31	...	415·41	469·67				
1931-32	...	430·09					
1932-33	...	532·25					
1933-34	...	498·82					
1934-35	...	370·13					
1935-36	...	408·34					
1936-37	...	399·59	429·19				
1937-38	...	440·85					
1938-39	...	527·07	...				
1939-40	...	608·59					

NOTE.—This includes primary and re-vaccination successful cases.

VACCINATION.

APPENDIX B.—Statement showing the number of vaccinations performed in Municipal Towns and Notified Areas (to which the Vaccination Act has been extended) on children under one year of age.

Towns.		Number of births during the year 1939-40.	Number of deaths among children under one year during the year.	Number of successful operations on children under one year during the year ending 31st March 1940.	Date of extension of Vaccination Act of 1880.	Date of extension of Vaccination Law Amendment Act of 1909.
(1)		(2)	(3)	(4)	(5)	(6)
Akyab	...	871	168	586	August 1883	29th March 1910.
Minbya	...	79	20	51	4th March 1930...	9th Sept 1931.
Kyaukpyu	...	156	14	133	April 1894	29th March 1910.
Sadoway	...	98	17	79	September 1890	Do.
Rangoon *	...	12,249	3,308	9,899	April 1884	1st May 1909.
Pegu	...	924	260	939	March 1893	29th March 1910.
Nyaunglèbin	...	316	117	337	29th March 1910	Do.
Tharrawaddy	...	247	52	149	October 1897.	23rd July 1929.
Thônzè	...	333	64	163	Do.	29th March 1910.
Zigôn	...	184	61	116	11th May 1914	9th Sept. 1915.
Letpadan	...	355	108	235	January 1897	29th March 1910.
Gyobingauk	...	257	88	108	February 1897	Do.
Minhla	...	157	30	119	11th May 1914	9th Sept. 1913.
Nattalin	...	152	24	121	Do.	Do.
Syriam	...	559	90	348	29th January 1913	29th January 1913.
Thônghwa	...	339	93	172	3rd March 1914	3rd March 1914.
Insein	...	577	148	905	14th March 1912	14th March 1912
Thamaing	...	174	75	113	26th May 1926	26th May 1926.
Thingangyun	...	125	42	320	Do.	Do.
Kanbe	...	227	64	343	Do.	Do.
Kamayut	...	258	86	263	Do.	Do.
Prome	...	1,225	334	930	June 1890	29th March 1910.
Shwedaung	...	340	109	159	10th Sept. 1917	23rd July 1929.
Paungdè	...	474	90	404	August 1890	29th March 1910.
Bassein	...	1,509	371	1,135	September 1888	Do.
Ngathainggyaung	...	203	48	104	February 1890	Do.
Kyônpyaw	...	217	30	138	26th Dec. 1923	23rd July 1929.
Henzada	...	891	281	616	January 1889	29th March 1910.
Myanaung	...	298	73	228	July 1889	Do.
Kyangin	...	186	41	158	August 1894	Do.
Myaungmya	...	337	74	173	June 1894	Do.
Wakèma	...	293	84	160	27th April 1907	Do.
Moulmeingyun	...	290	94	170	20th July 1925	20th July 1925.
Maubin	...	348	105	665	October 1891	29th March 1910.

* Includes Cantonment.

VACCINATION.

APPENDIX B.—Statement showing the number of vaccinations performed in Municipal Towns and Notified Areas (to which the Vaccination Act has been extended) on children under one year of age.—concl'd.

Towns.	Number of births during the year 1939-40.	Number of deaths among children under one year during the year.	Number of successful operations on children under one year during the year ending 31st March 1940.	Date of extension of Vaccination Act of 1880.	Date of extension of Vaccination Law Amendment Act of 1909.
(1)	(2)	(3)	(4)	(5)	(6)
Yandoon ...	291	99	229	January 1892 ...	29th March 1910.
Danubyu ...	236	54	221	9th July 1909 ...	23rd July 1929.
Pyapôn ...	410	102	270	November 1904	29th March 1910.
Kyaiklat ...	398	130	291	15th Dec. 1904 ...	Do.
Thatôn ...	750	128	496	October 1891 ...	Do.
Kyaikto ...	168	43	142	March 1897 ...	Do.
Moulmein ...	2,189	423	1,445	August 1885 ...	Do.
Kawkareik ...	326	112	165	September 1914	17th Sept. 1914.
Tavoy ...	1,097	233	1,009	December 1889	29th March 1910.
Mergui ...	833	287	563	October 1891 ...	Do.
Toungoo ...	761	84	826	May 1889 ...	Do.
Shwegyin ...	219	44	138	January 1890 ...	Do.
Pyu ...	338	75	296	January 1920 ...	17th January 1920.
Thayetmyo ...	361	89	363	May 1889 ...	29th March 1910.
Allanmyo ...	445	121	273	May 1901 ...	Do.
Minbu ...	243	51	196	March 1896 ...	Do.
Salin ...	223	85	158	Do. ...	Do.
Magwe ...	314	112	194	10th March 1913	10th March 1913.
Taungdwingyi ...	453	245	257	February 1893 ...	29th March 1910.
Yenangyaung ...	531	165	385	10th March 1913	10th March 1913.
Chauk ...	477	135	264	20th May 1929 ...	23rd July 1929.
Pakôkku ...	831	405	384	April 1892 ...	29th March 1910.
Mandalay * ...	8,183	1,929	7,425	August 1891 ...	Do.
Maymyo * ...	1,044	199	653	October 1912 ...	22nd October 1912.
Myitngè ...	153	41	239	4th June 1930 ...	2nd August 1940.
Kyaukse ...	333	106	196	May 1894 ...	29th March 1910.
Meiktila ...	337	106	234	June 1906 ...	31st July 1922.
Myingyan ...	1,076	409	658	September 1891	29th March 1910.
Nyaung-u ...	280	112	174	30th August 1921	30th August 1921.
Yamèthin ...	385	94	303	February 1892 ...	29th March 1910.
Pyinmana ...	757	208	422	November 1891...	Do.
Pyawbwè ...	255	81	126	May 1912 ...	23rd July 1929.
Bhamo ...	289	66	191	26th October 1894	29th March 1910.
Myitkyina ...	310	49	200	6th May 1929 ...	23rd July 1929.
Shwebo ...	580	152	388	June 1894 ...	29th March 1910.
Ye-u ...	151	56	112	2nd April 1929 ...	23rd July 1929.
Sagaing ...	512	149	226	April 1894 ...	29th March 1910.
Myinmu ...	213	74	225	5th October 1926	5th October 1926.
Mawlaik ...	129	26	70	31st Dec. 1930	2nd August 1940.
Mônýwa ...	476	169	364	March 1893 ...	29th March 1910.
Total ...	52,605	13,911	41,310 †		
	FEDERATED		SHAN STATES.		
Lashio ...	278	63	329	25th July 1927 ...	25th July 1927.
Kalaw ...	144	10	104	Do. ...	Do.
Taunggyi ...	450	56	311	Do. ...	Do.
Total ...	872	129	744		

* Includes Cantonment.

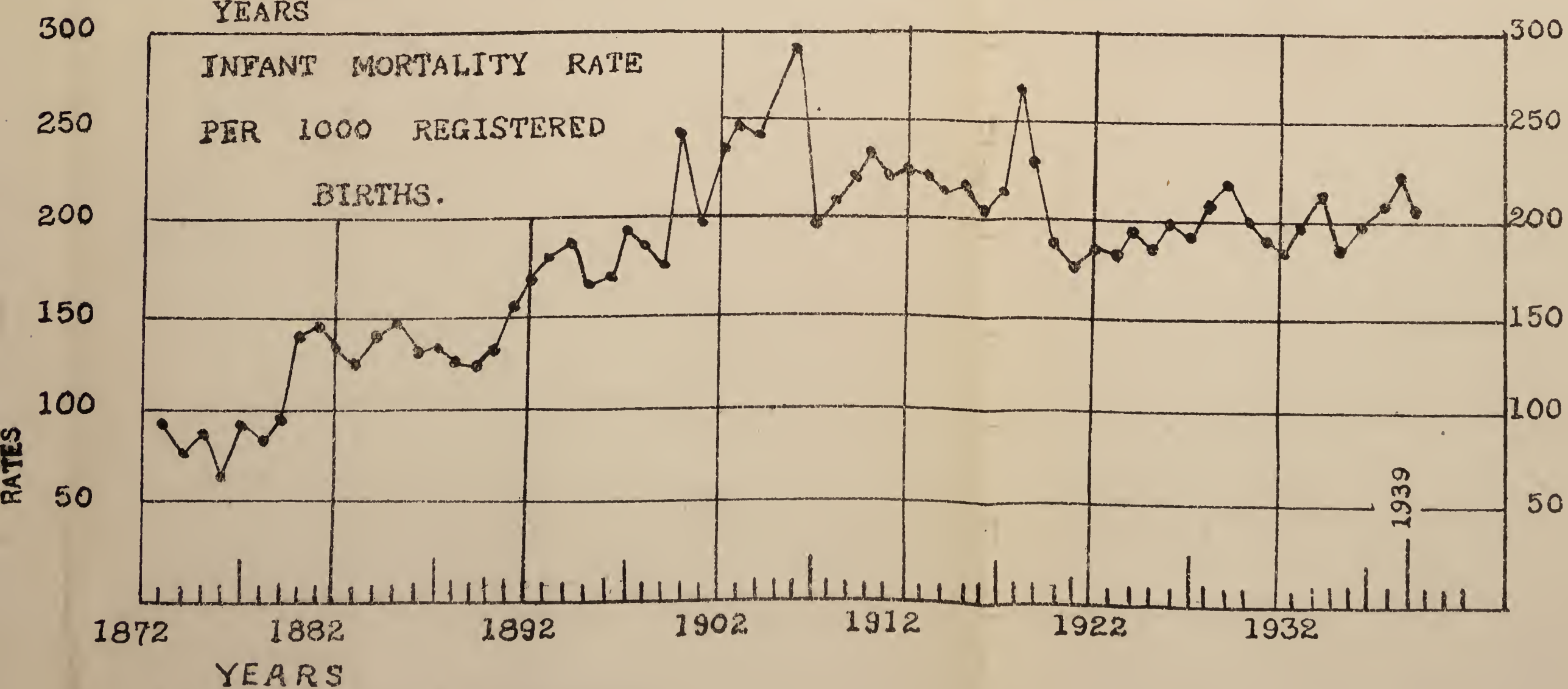
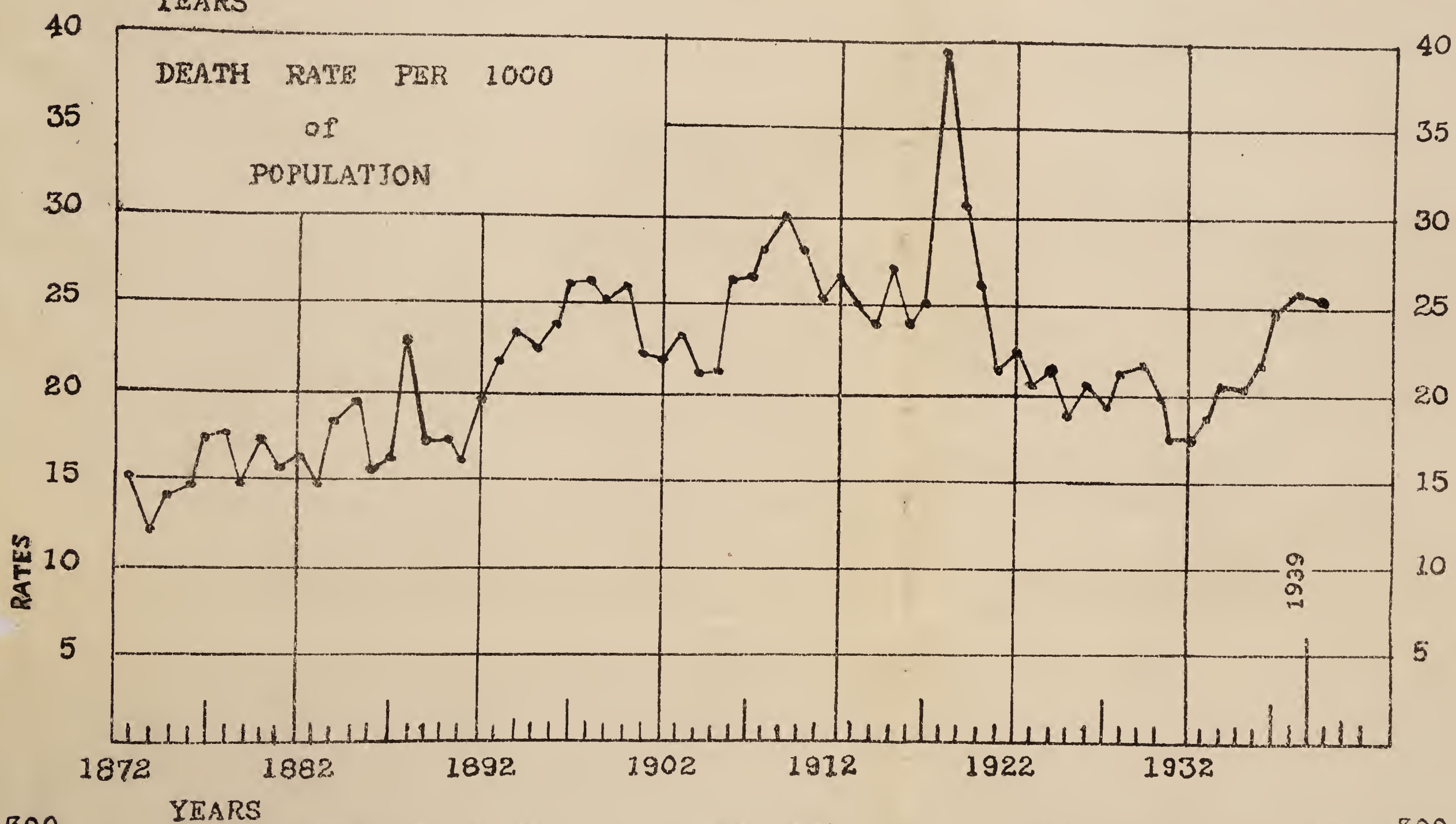
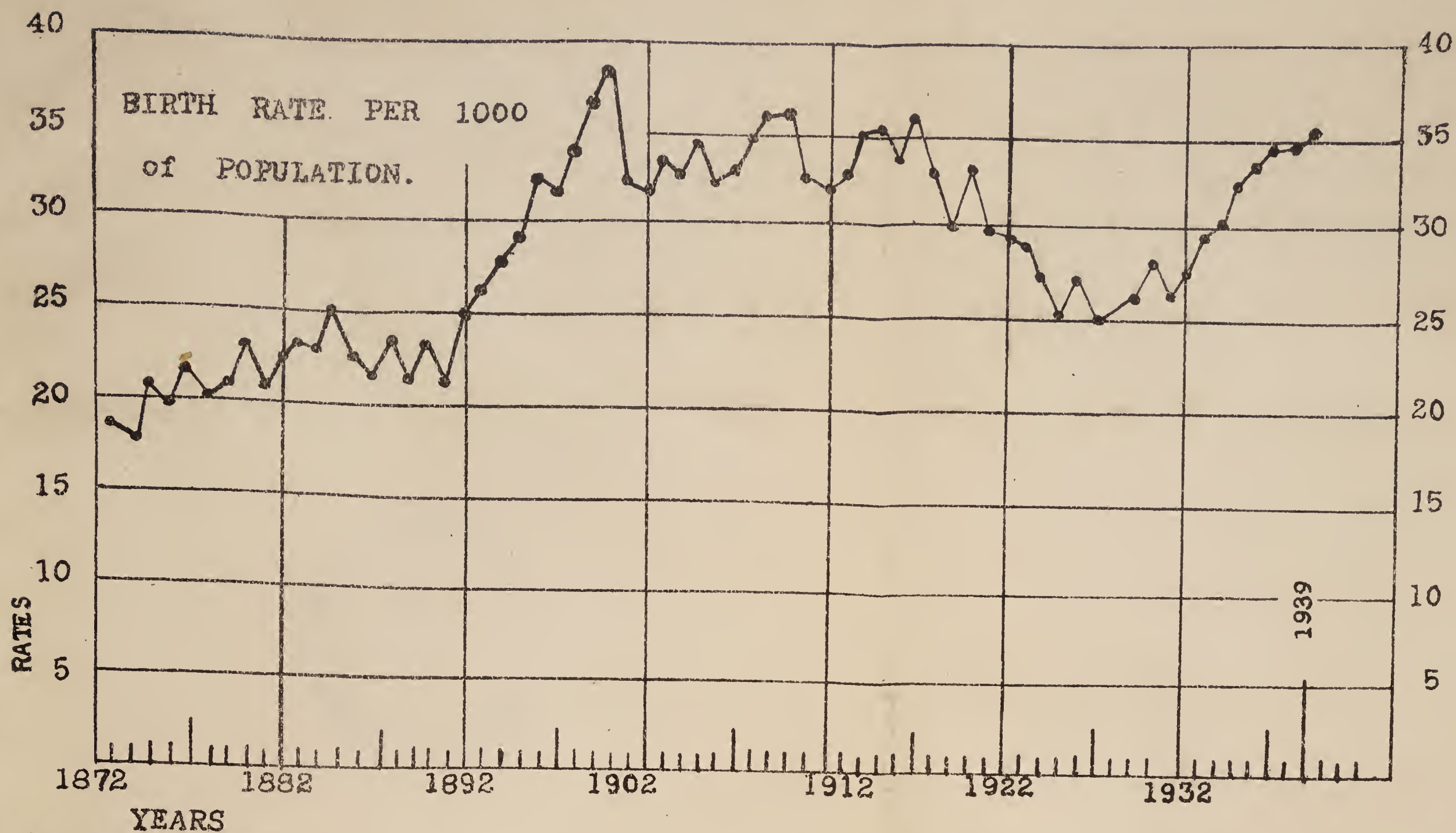
† Includes 344 of Cantonments, 448 of Railway Dispensary, 13 of other Dispensary and 184 of Private Medical Practitioners, etc., in Urban Areas.

G.B.C.P.O.—No. 50, D.P.H., 25-11-40—520—III.



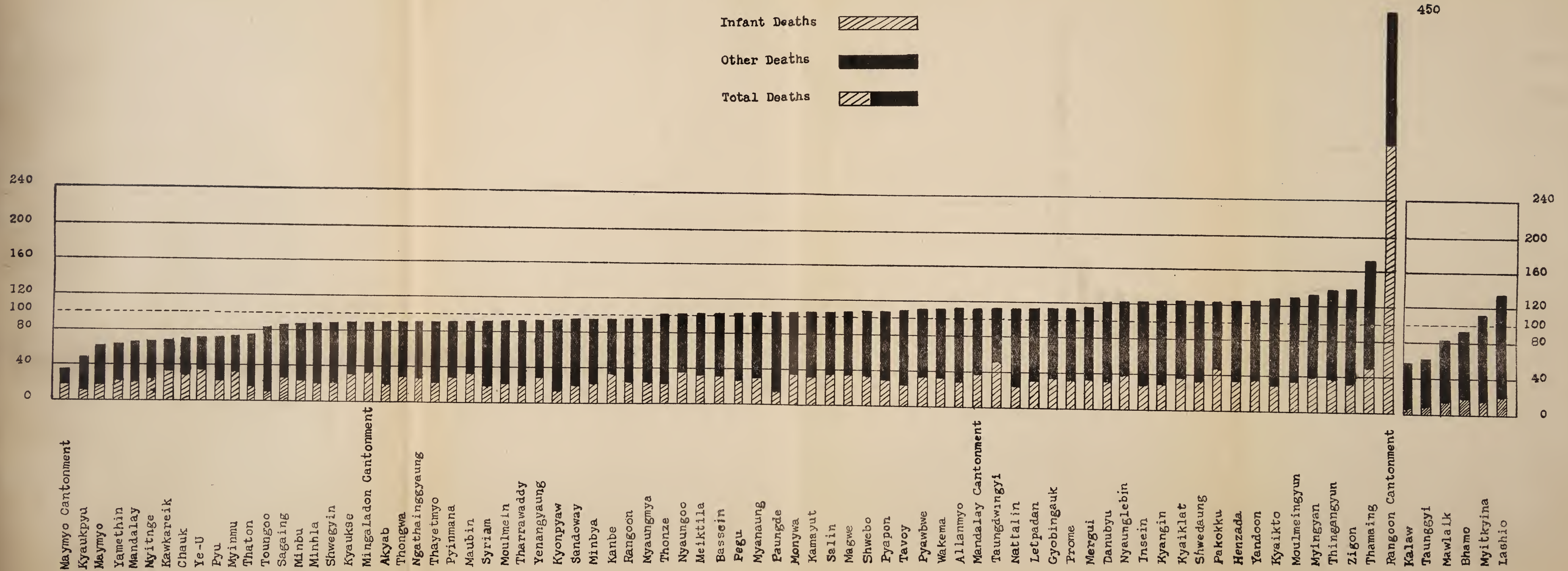
VITAL STATISTICS CHART I

BIRTH, DEATH AND INFANT MORTALITY RATES IN BURMA.





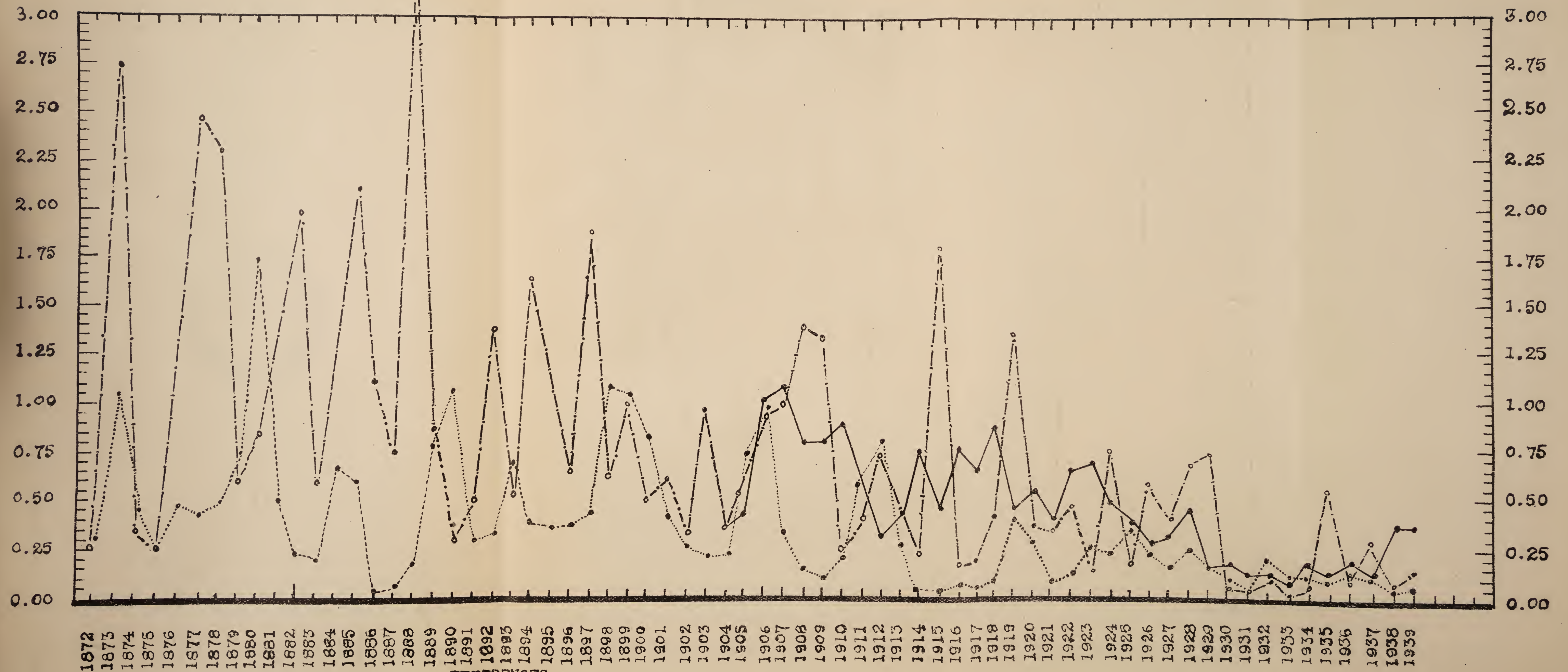
VITAL STATISTICS CHART II
 NUMBER OF DEATHS PER 100 BIRTHS IN TOWNS IN 1939.





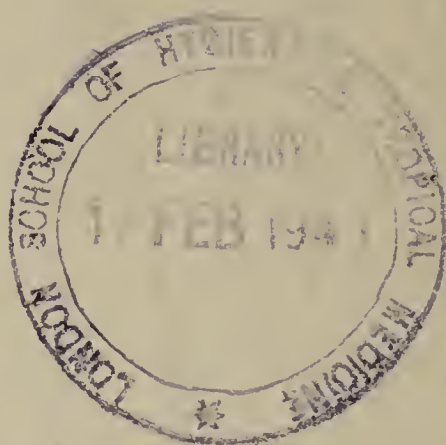
VITAL STATISTICS CHART III.

RATES OF DEATHS FROM EPIDEMIC DISEASES IN BURMA



REFERENCES :-

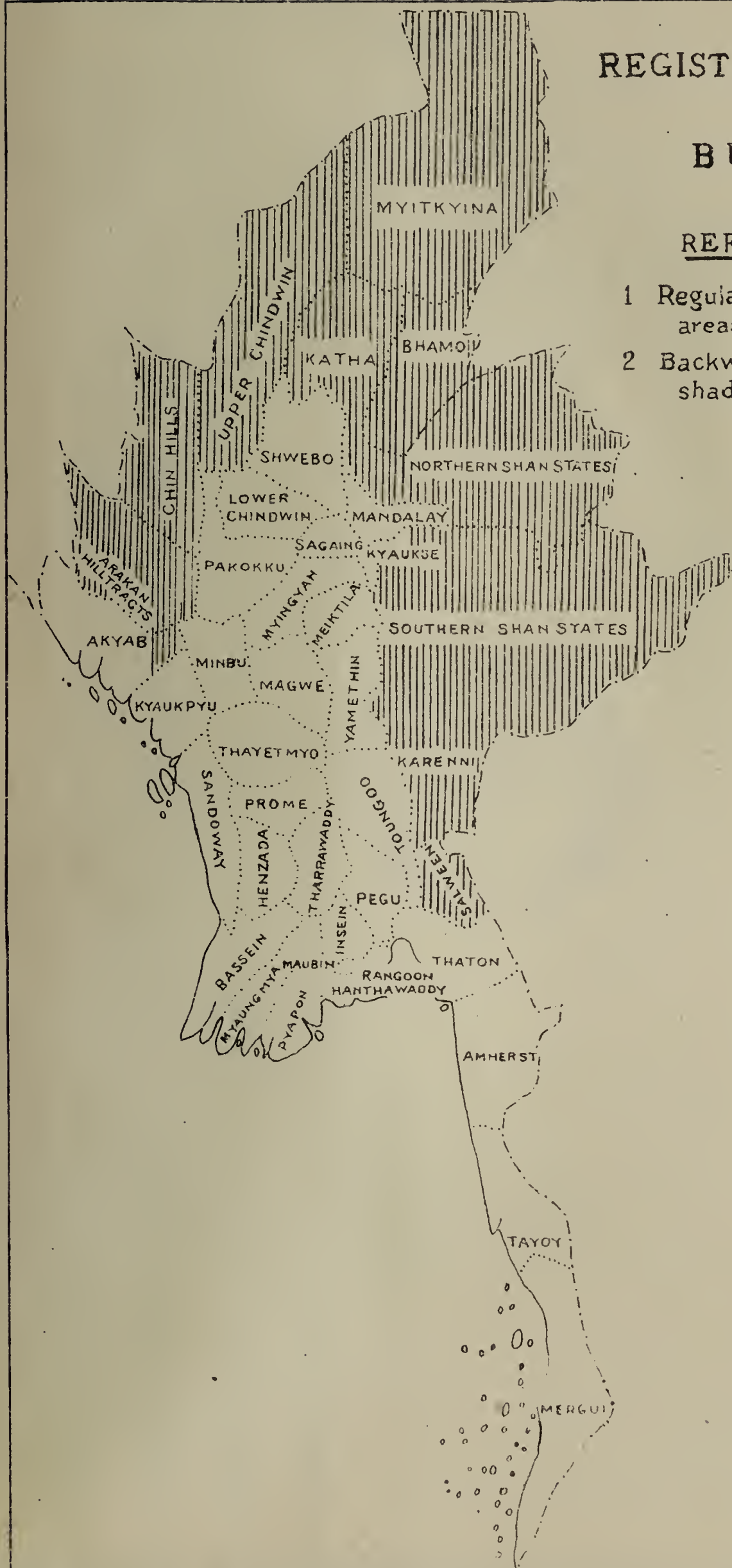
Cholera death rate ————
 Small-pox " " ————
 Plague " " ————



REGISTRATION MAP OF BURMA.

REFERENCES

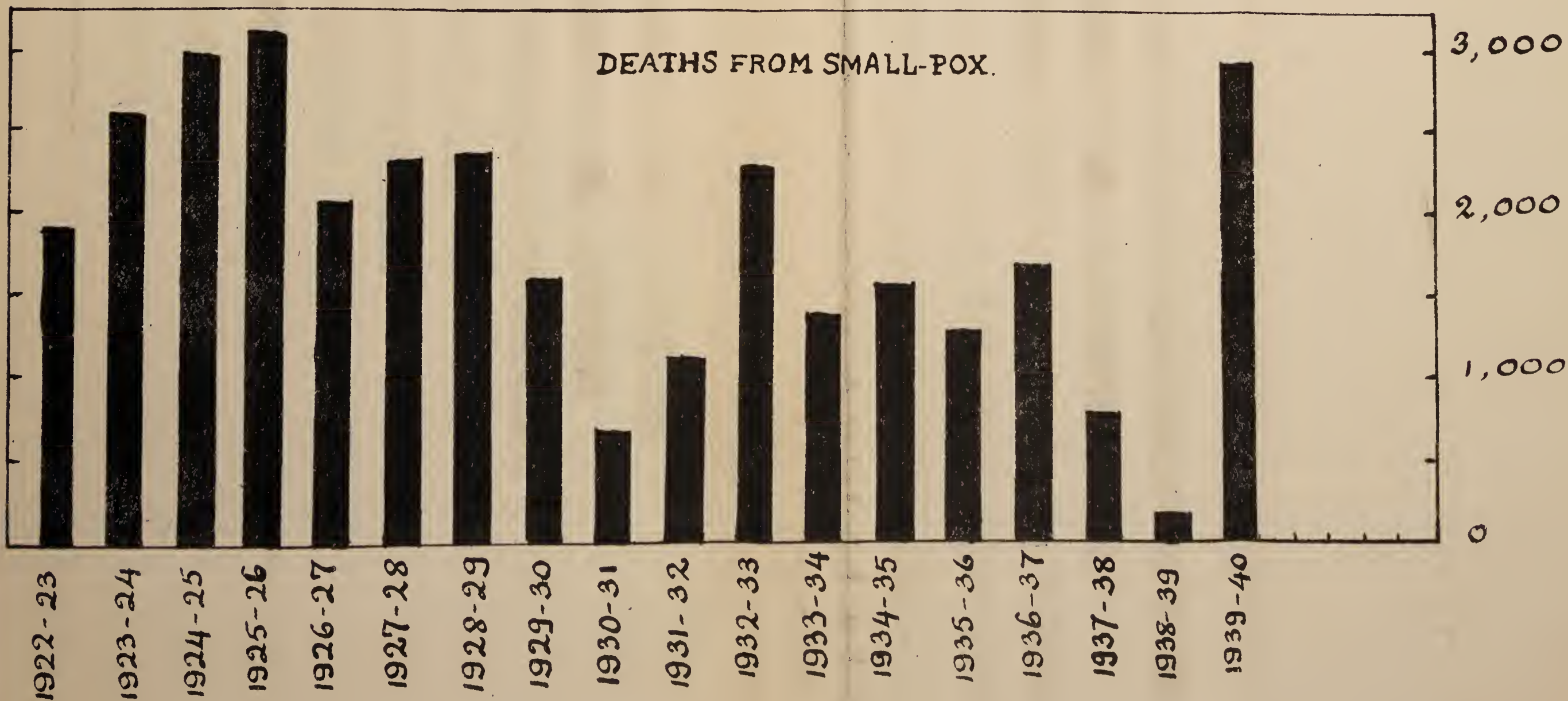
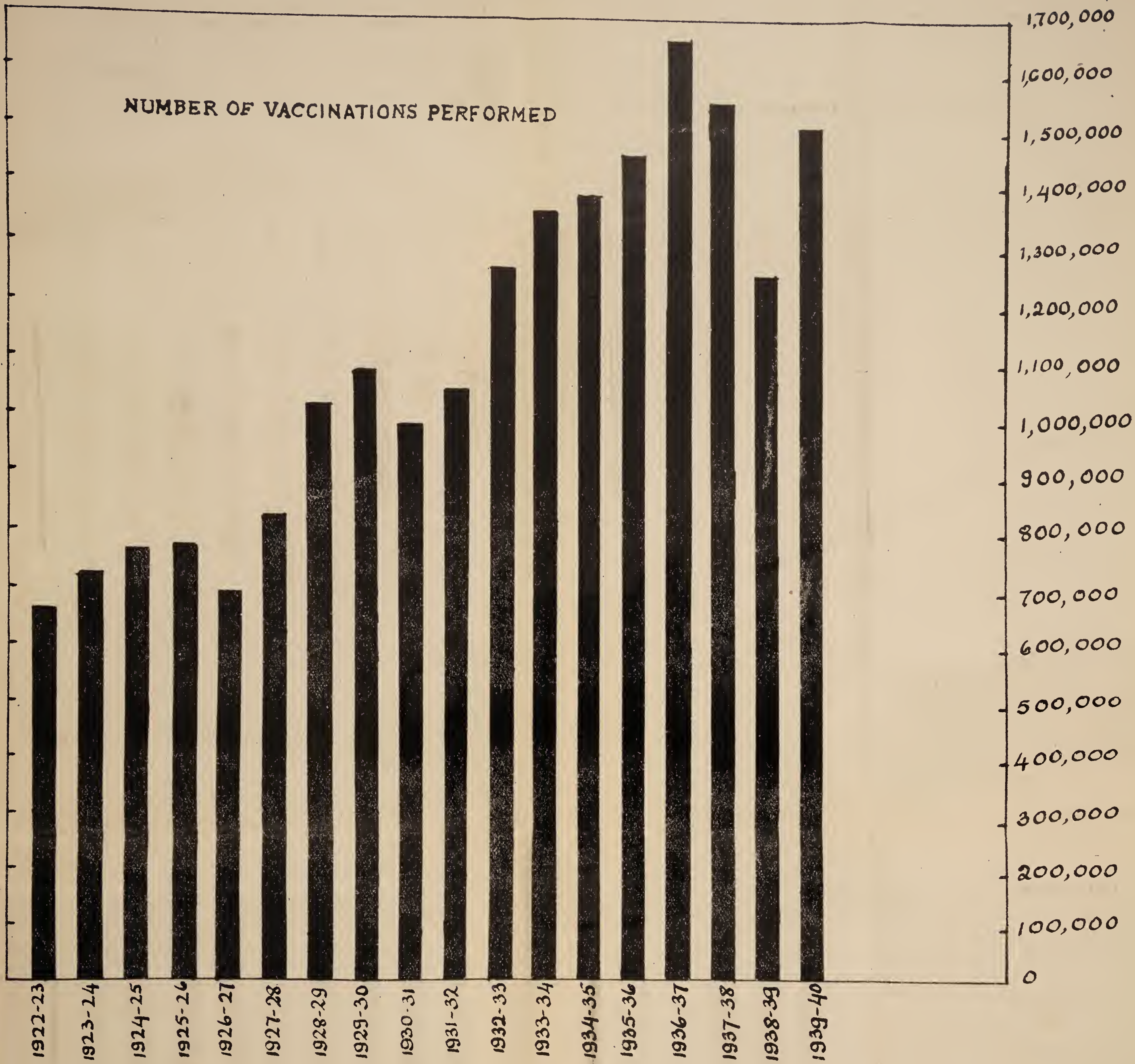
- 1 Regular Registration areas in clear
- 2 Backward areas. shaded.





Vaccination Chart I

Diagrams showing the Vaccinations Performed and the Deaths from Small-pox in Burma (excluding Backward-Tracts) since the year 1922-23.





Vaccination Chart II.

Diagram showing the Proportion of Population protected during the Seven Official Years from 1932-33 to 1938-39 and the Death-rate from Small-pox during the year 1938 in districts where full registration is in force.

